

NOVEMBER 1959

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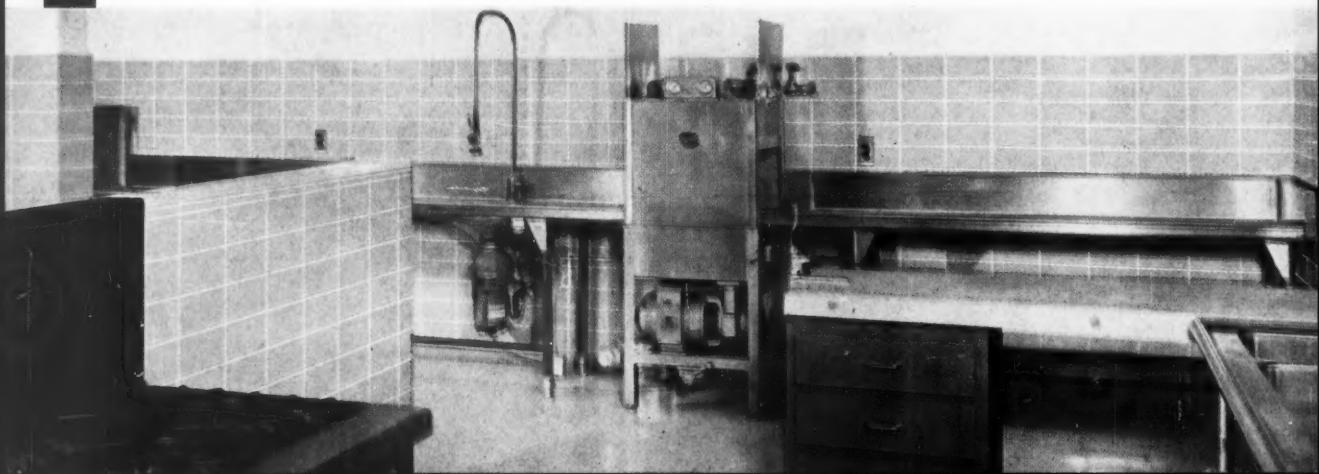
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The School Executive

NOVEMBER 1959

Volume 79

Number 3

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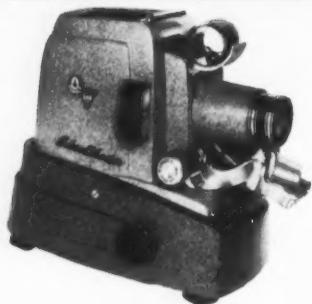
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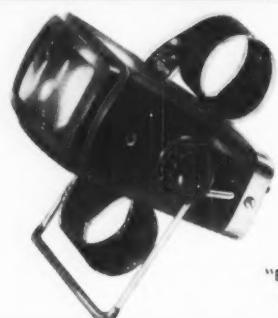
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The School Executive

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PREVIEW OF DECEMBER

The December issue will be a benchmark. It will be the last issue in the long life of THE SCHOOL EXECUTIVE. After the December issue it will become an integral part of our new magazine, OVERVIEW.

Because the December issue is the last under the present name, we will take the space devoted to Keynotes to review the history of the magazine and to try to associate its developments to the tremendous changes in school administration which came during its lifetime. Also, the December issue will mark the last of the editor's attempts to present his point of view on a current educational issue on his page, *As I See It*. A review of trends in school administration during the past 10 years, the featured piece in the issue, promises to be an interesting report. Van Miller presents another article in his series on the school administrator. All regular features will be presented. A Happy Thanksgiving to you all.

—WALTER D. COCKING, editor

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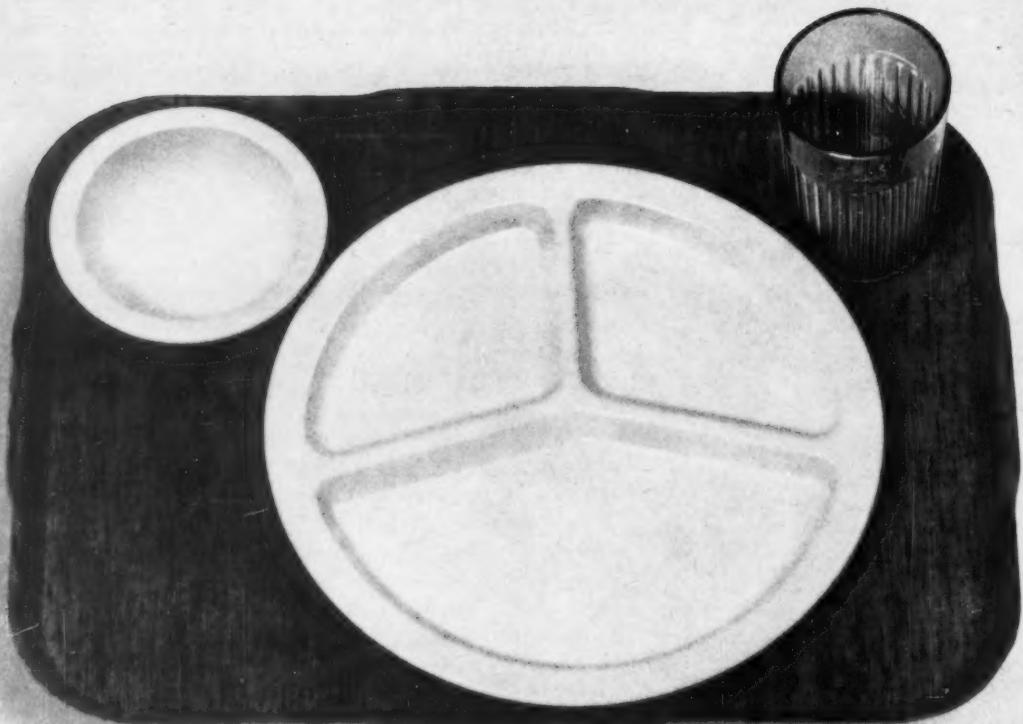
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AS I SEE IT

by Walter D. Cocking

Criticism and School Policies

DURING THE PAST several years, we have witnessed a storm of criticism, relevant and irrelevant, of our schools. Every American, it sometimes appears, exercises his inalienable right to toss a barbed criticism at the schools.

We are concerned here with the influence criticisms have on school policies and practices. Have American school officials shed the criticism they have heard or have they been affected by it enough to change policies and practices? Certainly administrators have not been unmindful of the barrage of criticism. It is clear that these criticisms have been a factor in the development of various policies and practices.

In the area of instructional programs, for example, much criticism has been directed at the extent and quality of instruction in foreign languages. Prior to World War II, little special attention was given to the teaching of foreign languages. Several languages, usually Latin, French or Spanish, were listed as electives, but received little special emphasis and were not considered by many as essential parts of a student's development. After the war and for a variety of reasons, criticisms of inadequate foreign language teaching began to mount. As the nation assumed international leadership—visiting, making investments in and assisting other nations of the world—it became painfully apparent that we were handicapped by our lack of ability in the language of these lands. So, many people began to urge that the schools expand foreign language teaching both in quantity and quality.

THE SCHOOL ADMINISTRATOR and his associates, noting the criticism, examined the foreign language program and considered possible changes. As a result, foreign languages are receiving attention and consideration greater than they have had for many years.

A similar situation with much the same results has oc-

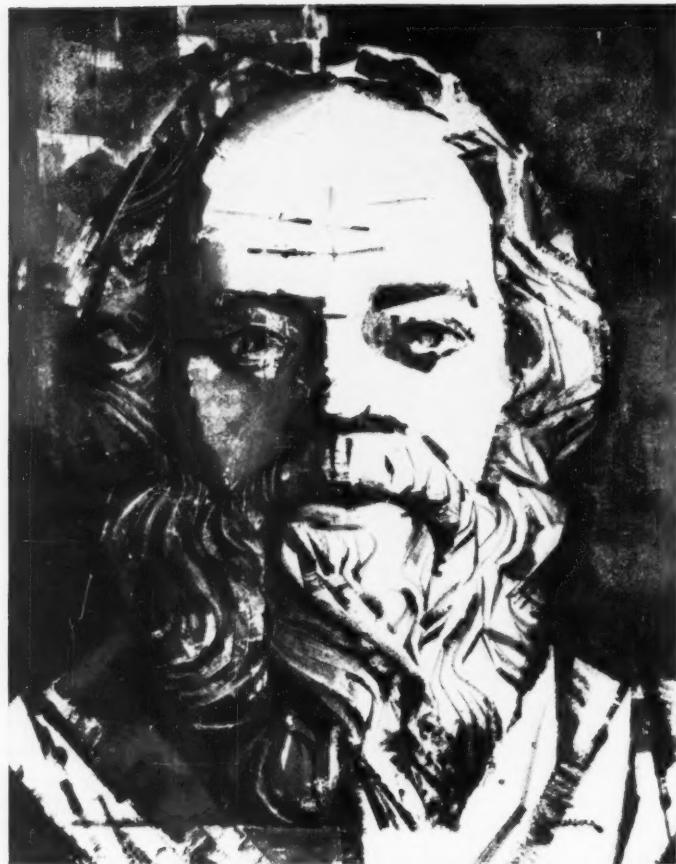
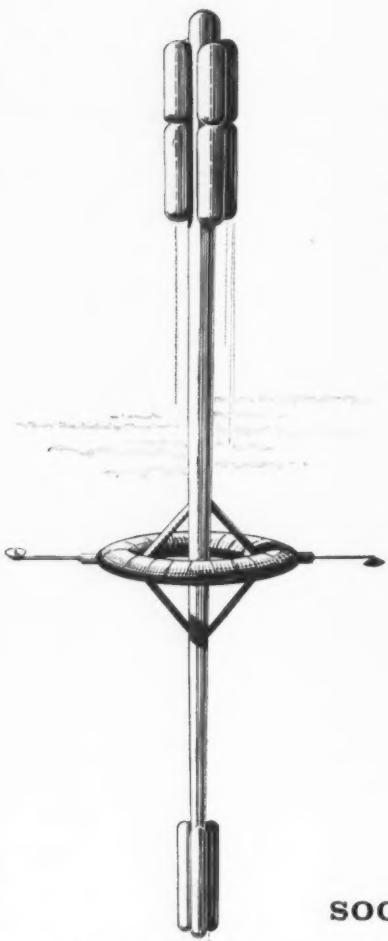
curred with the teaching of science and mathematics.

Another example of criticism and its effects is the longer-school-year issue. Since Sputnik I especially, many critics, for various reasons, have been sounding the drums for some form of a year-long session. It is interesting to note the attention that school administrators now give to summer school sessions. In the past two or three years the number of school systems holding some kind of a formal summer program has increased markedly. Also emphasis is given to the opportunity thus provided for the "gifted" and normal student. There is less emphasis on summer sessions for "make-up" work and the slow learner. Here again we have an illustration of the relationship of criticism to school policy change.

AGAIN, THE VAST array of criticism dealing with such problems as drop-outs, failures, low academic standards, juvenile delinquency and lack of pupil interest cannot be disassociated with the administrators' urgent advocacy of more and better counsellors or guidance staff and more and better qualified "visiting teachers." Criticism, then, does not go unnoticed. In other words, when the shoe seems to fit there is an effort made to wear it.

Unfortunately the resulting new policy is not always wise. As an illustration, the present tendency to increase the size of classes is not based upon the results of research. All too frequently the new policy results from the continued pounding on "schools cost too much" plus the clamor of a few zealots who seem to believe that larger classes will somehow bring greater efficiency.

As I see it, the administrator not only should be aware of criticism, sound or unsound, but he should weigh and evaluate it. On the other hand, policy changes should come only when there is definite evidence that the change contemplated will result in a better opportunity for all students.



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Impasse in School Design?

THERE IS LITTLE recent indication that creative architects are making any new breakthrough for better school architecture. In contrast to the exciting design developments of the late 40's, particularly in the elementary schools, there have been no comparable architectural developments in the latter years of the 50's. We have examples, to be sure, of several refinements of basic design, yet very little has evolved in recent years which we could justifiably call beautiful, really functional or a better solution.

Are we to conclude that architects believe ultimate excellence has been achieved? The designs of new secondary schools and especially new college buildings show few such imaginative solutions as occurred in elementary schools a decade ago. The design changes in these types of buildings have not really reached the basic demands which are needed and recognized.

Architects can continue to improve greatly the design of all kinds of educational buildings. Our school buildings teach, and if they are to teach constructively they must be designed more carefully for the period in which we live, for the 20th century youth who will live in them, and for the programs which youth of this period must experience.

With faith in the creative ability of today's architects, let's hope that they will find ways to give us ever better design for the thousands of buildings Americans will build in the years ahead.

A Liberal Education

THERE IS a definite distinction between *liberal education* and *liberal arts*. Liberal arts ordinarily refers to an arrangement of courses pursued in a liberal arts college. Liberal education, on the other hand, is that educational process which gives a student acquaintance and some understanding of the enormous range of knowledge of the world and its people. Liberal arts is a narrow segment of all that is involved in the meaning of liberal education. It is unfortunate that too many use the two terms synonymously.

It seems wise for many students to pursue a liberal arts sequence of courses preparatory to intensive specialization; it is also wise for those who do not plan to study beyond four years of college undergraduate work. A liberal education is sought throughout life both within and without the structured educational organization. It is man's attempt to know and understand the world in which he lives. It is a goal he never reaches but one

which drives him to become a worthy member of society. Liberal education is not measured by credits or degrees. Its measure is man's understanding of the world about him.

Liberal education is needed by the specialist and by the generalist. It is the magnet which draws from man his best effort to know, understand and appreciate his environment. A liberal education is secured from books, men, observation and, most of all, by the effort he makes to understand all the forces of the universe. A liberal education is a worthy goal for all men and for all education.

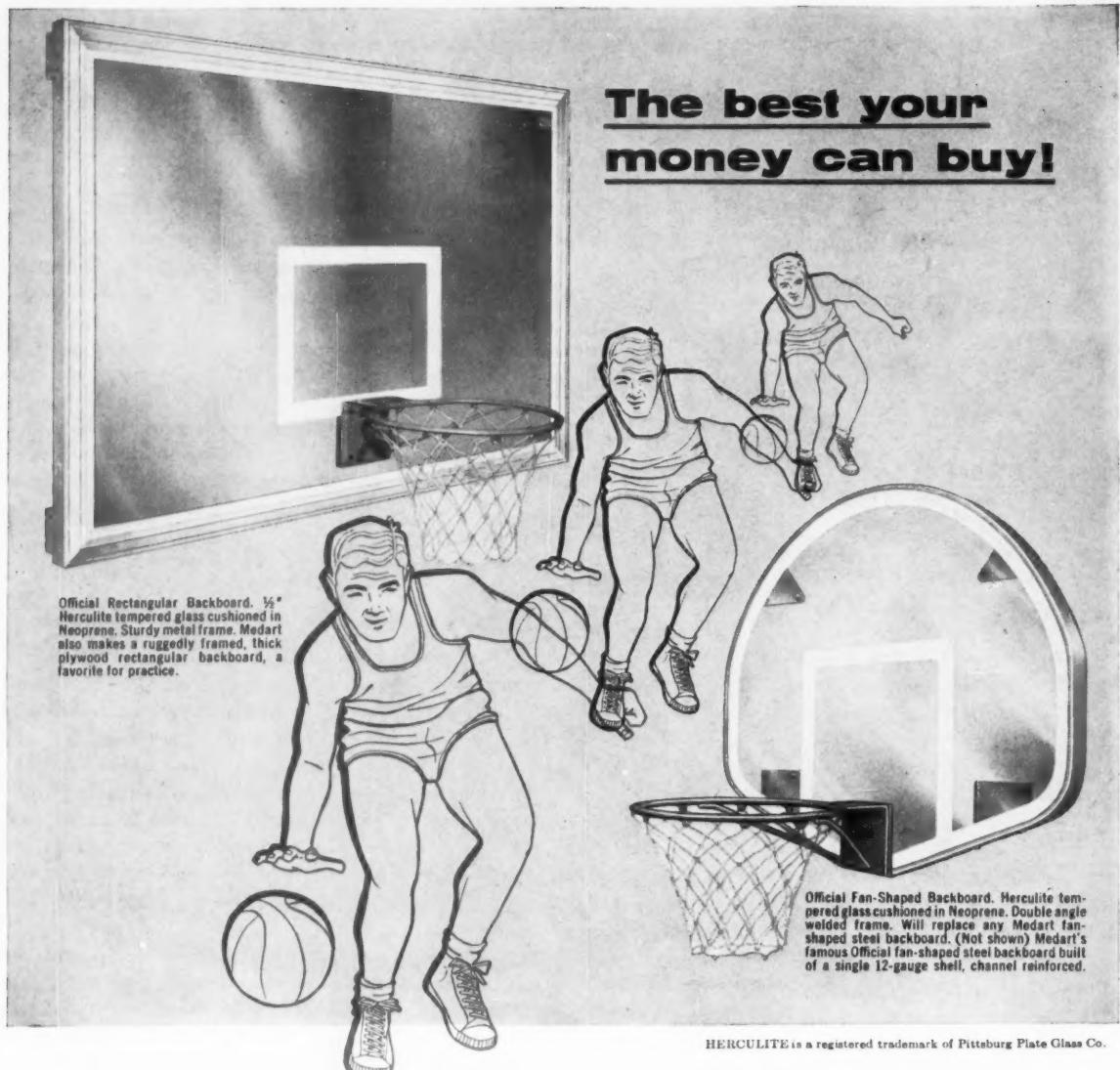
Need for New Materials and Equipment

THE TECHNOLOGICAL age in which we live makes it quite possible to develop in some form almost any kind of material or equipment which man can use. Industry demonstrates this truth every day. The military in its continuing effort to find more effective ways of destruction, and equally so to prevent destruction, always calls its present equipment obsolete because it knows that something more effective is possible. But education on the contrary seems to give little attention to materials and equipment as aids to increasing effectiveness and efficiency.

While there are thousands of items used by schools and colleges, few of them have resulted from the efforts to meet an educational need. In the majority of cases, manufacturers have created and produced the materials used by schools and have then attempted to sell them to the educator.

Students of industry tell us that 90 percent of the cost of the average new industrial plant is spent on equipment and 10 percent on the structure. It is interesting to observe that almost the opposite is true of educational plants. Could it be that the educator believes that the process of education is still largely "telling" and "listening?" Could he be afraid of equipment as a possible rival? Whatever the reason, it is amazing how small the use that is made of equipment in the educational process. Even more deplorable is the almost complete absence of demand by the educator for effective teaching equipment.

Today the educator must look to technology for materials which will increase teaching effectiveness. He can no longer afford to remain passive and indifferent. One continuing phase of educational research must concern itself with creating instruments which will improve teaching effectiveness. The first step is to appreciate the need for such tools.



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PAMPHLETS OF INTEREST**Research**

Cooperative Research Projects. This pamphlet describes briefly the cooperative research program of the Office of Education and the research projects initiated during the fiscal year 1957. Office of Education. 1958. 63 pp. 25¢.*

Teaching Aids

Bridges for Ideas—Production of 2 x 2-Inch Slides For School Use, by Joe Coltharp, describes techniques that teachers may employ in producing 2 x 2-inch slides, discussing simplified methods, equipment and supplies needed, and sources of the necessary materials and equipment. Published by the Visual Instruction Bureau, Division of Extension, University of Texas, Austin 12, Texas. 80 pp. \$2.

Tests

Standardized Tests for use in connection with the National Defense Education Act of 1958. This list is prepared and distributed by the American Textbook Publishers Institute, 432 Fourth Ave., N. Y. 16.

Promising Practices in Nutrition Education in the Elementary School by Willard J. Jacobson, Fannie Lee Boyd and Mary M. Hill. Bureau of Publications, Teachers College, Columbia University, N. Y. 27. 1959. 46 pp. \$1.

Handbook of Tests for Purchasing is an analysis of the value of sampling, inspection and testing of supplies and materials used by schools. It suggests policies and procedures for purchasing agents, and describes specific tests for over 60 items. Published by the California Assn. of Public School Business Officials, 111 North Grevilia Ave., Inglewood, Calif. 54 pp. \$2.

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Towards More Effective Leadership

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sional domain by action recently taken to raise standards of administration and improve leadership of the American schools.

Martin Essex, superintendent of schools in Akron, Ohio, and currently president of the AASA, announces that the Association's program will be financed with \$346,843 granted for the purpose by the W. K. Kellogg Foundation. This brings the total of the Foundation's contribution towards the advancement of school administration to \$6,885,599. Earlier grants went largely to universities participating in the Cooperative Program in Educational Administration. The latest project will be carried on under the direction of the AASA Committee for the Advancement of School Administration, headed by Paul J. Misner, superintendent of schools in Glencoe, Ill.

The new plan for elevating the professional status of the school executive follows the recent amendment of the AASA constitution which requires that after 1963 all new members must have completed at least two years of graduate study in special courses in accredited universities, and is an important step in the implementation of that action.

Accrediting these universities and colleges will accomplish what the late Abraham Flexner accomplished when he classified medical schools with the aid of a Foundation grant nearly half a century ago. This accreditation resulted in a permanent and recognized medical profession with dependable standards of skill and knowledge. Either substandard preparation for physicians and surgeons was raised to meet the levels demanded, or the institutions ceased offering courses in medicine.

There are, at present, more than 300 colleges and universities offering programs of preparation for school administrators. Since only about 800 superintendents enter the field annually, even if all these appointments required graduation from courses for the special preparation of school executives, it is difficult to see why 300 institutions should be offering such courses. Dr. Misner estimates that it would take fewer than 100 institutions to meet the foreseeable superintendency needs.

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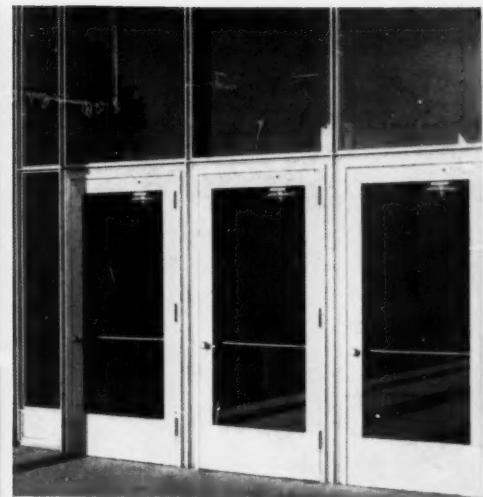
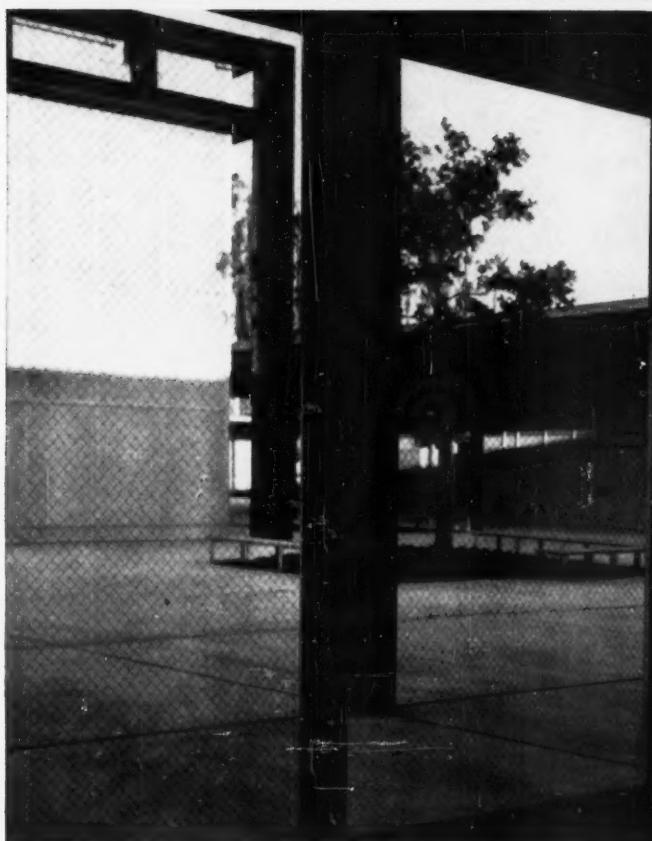
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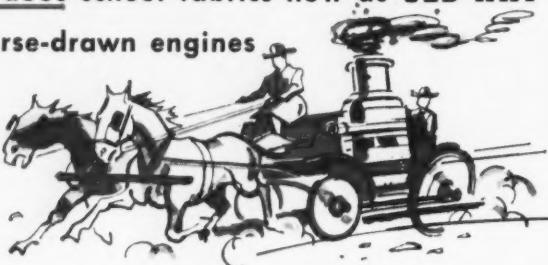


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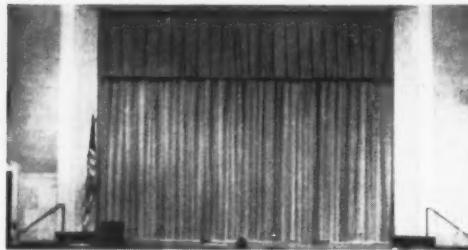
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WASHINGTON SCENE

Teacher Education is now engaged in drawing up standards to be applied in accrediting colleges and universities. A survey of graduate schools of education is in process. A superintendent located near each graduate school will collect lengthy and detailed information from the dean and faculty, and inventory the courses and facilities used in preparing school administrators.

An expensive program

"An accredited program will be an expensive one for any university to undertake," Dr. Misner told a large press conference held to announce the project. "We do not think any college or university should want to undertake it unless it is willing to make educational administration one of its central concerns."

"It will call for university resources of real depth, and many resources outside the university field," he said. "It will mean setting up extensive research programs on the campus. It will make necessary expensive field trips and surveys off campus, plus a program of internships for the student administrator."

While the student administrator courses would draw heavily upon the academically organized fields of knowledge, and call for varied types of class and seminar offerings, Dr. Misner does not feel that these would be beyond the reach of the present school or college of education.

The next important step in this program is to gain state support. A considerable part of the Kellogg grant will be used for a series of state and regional conferences at which persons in key state positions will be brought together for consideration of the new plan. Participants will include representatives of state departments of education, state associations of school administrators, school board associations and colleges and universities. Out of these conferences will come state, regional and local timetables of action for the professional upgrading of school administrators.

"Let time tell"



L. G. Derthick

The final report of the Derthick Commission's trek to the Soviet Union shows how radically different are the objectives of school administration here and in the U.S.S.R.

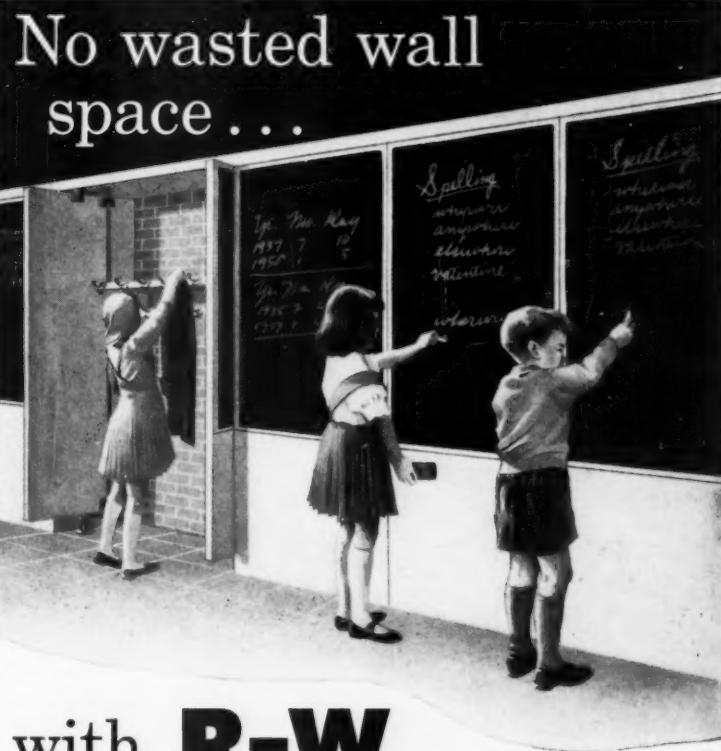
The report of the visitors, published under the title, "Soviet Commitment to Education," describes Soviet education as operating under an outwardly decentralized administrative setup with one central Ministry of Education to whom 15 ministries of the Republics are subordinate. Under these ministries are many local and regional agencies responsible for education in their respective areas, but policies governing the action of all are controlled at three different political centers by Federal Government agencies, by Federal organs of the Communist Party, and by Republic bodies of both Government and Party.

While only 25 to 30 percent of the 1.8 million Soviet teachers belong to the Communist Party, it is difficult to escape the conclusion that their positions are at least partly political. They are encouraged to work in Communist youth organizations and are given extra pay for doing so. The party policies which guide both education and the teachers are reflected in the following statements by Premier Khrushchev:

"In the center of educational work the Party places labor training for all persons, the development of a conscious Communist attitude toward work."

"There ought to be but one path for every pupil independently of his parents' position; to go to study, and, having studied, to go to work."

At the Federal level of jurisdiction, the USSR Ministry of Higher Education has broader powers over



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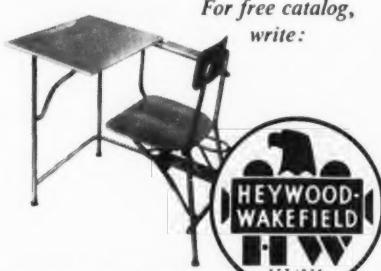


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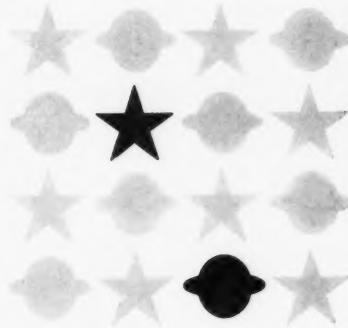
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November, 1959

college and specialized institutions than has any other agency, regional or local. It has complete jurisdiction over some 220 higher institutions, has incomplete jurisdiction over another 400, and controls questions of science, research, teaching and methodology in all other higher and specialized educational programs.

"Direct comparisons of the quality of education in two countries as different in goals and aspirations as the United States and the Soviet Union are difficult, if not impossible," said the American reporting team. Soviet teaching methods and content are designed to insure that "every pupil passes." Individual tutoring, incentives and awards help accomplish this objective.

Perhaps the greatest reason for such achievement is, however, that "examinations are confined primarily to those elements in which pupils have been intensively drilled. Little if any attention is given questions involving the application of knowledge to new situations. Teachers evaluate pupils on each lesson and daily recitation. Low marks are usually considered a reflection on the teacher rather than the pupil."

The surveyors report close cooperation between home and school. There is apparently no teacher shortage. Salaries of beginning teachers are equal to those of beginning physicians, surgeons and engineers. There are definite increases on a regular salary schedule based on length of service. Pensions are granted after 25 years.

The reporters were particularly impressed with the nurseries and kindergartens. "Teacher load in the general schools was favorable, laboratory and teaching equipment aids were adequate. Foreign language was taught effectively."

The Soviets are clearly in a race for world leadership. Their schools are part of the power and the machinery for winning that race. As one Soviet official told a member of the U. S. group, "We believe in a planned society. You in individual initiative. Let time tell."



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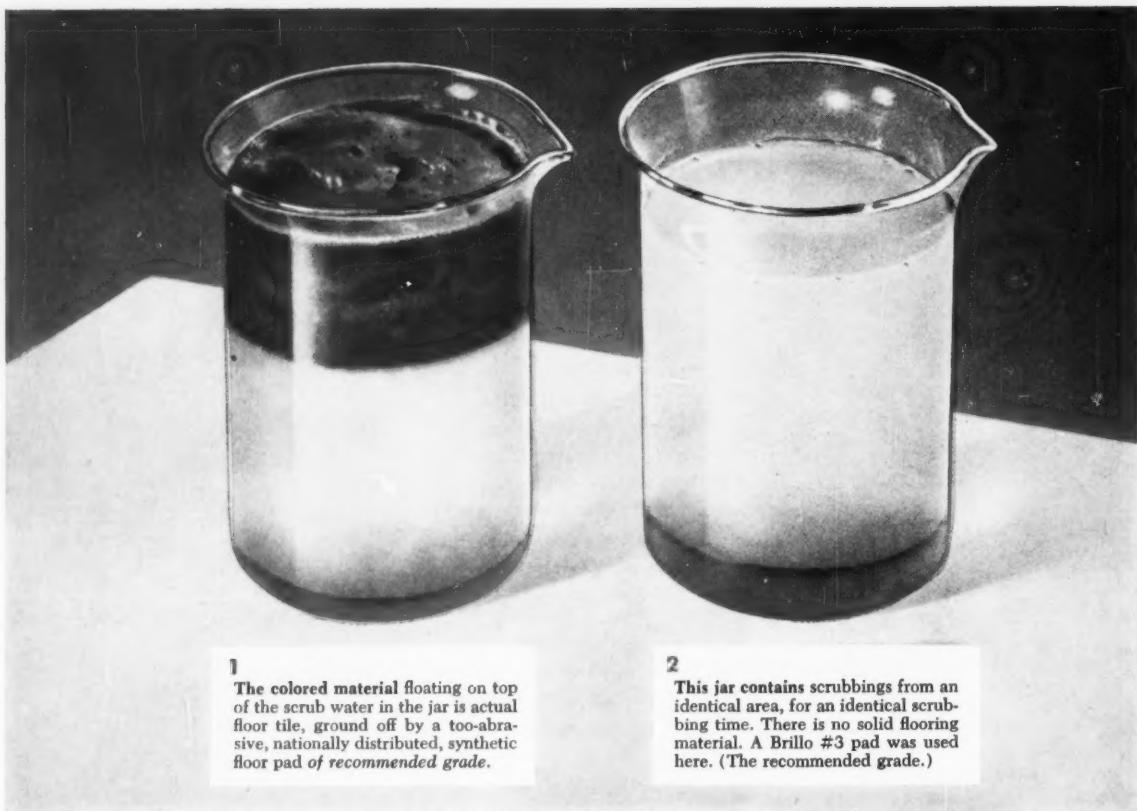
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Are your floors being washed down the drain? Here's what comparison tests prove about floor pads

The purpose of a floor scouring pad for use with a floor maintenance machine is to remove the traffic grime, old wax and stains from the floor. Unfortunately, some of the widely advertised, synthetic floor pads now being sold are so abrasive that they remove the floor surface, too . . . as these tests prove:

The test set-up: Two identical areas of asphalt tile floor are scrubbed with plain water for five minutes each. The same floor machine is used for each area.

AREA 1 . . . scrubbed with the recommended grade of a nationally advertised synthetic scrubbing pad.

AREA 2 . . . scrubbed with the recommended grade of Brillo metal fiber Floor Pad.

Procedure: After scrubbing, all of the water and free solid matter is collected from each area and deposited in identical glass beakers (see photo).

Results: The first beaker, on left in photo, shows the wash water settled in the lower part of jar. The colored matter floating on top is *actual flooring, ground from the*

tiles by the severe abrasive action of the synthetic pad!

The second beaker contains the material from the section of the floor cleaned with the Brillo Floor Pad. It contains only the wash water with dirt settled to the bottom. *The minute amount of actual tile material is barely sufficient to tint the water.*

Conclusions: The floor pad used on area #1 is far too abrasive for floor-cleaning use. Its repeated use will cause serious floor damage.

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IMPROVEMENT IN EDUCATIONAL QUALITY— FINANCIAL TASK AHEAD

by ARVID J. BURKE

Director of Studies, New York State
Teachers Association and Member
of NEA Committee on Educational
Finance

Increased productivity via technology has been an outstanding feature of the American economy. Manpower, released by automation, augments enrollments in high schools and colleges, causes lengthening the duration of school attendance and creates employment of an increasing number of teachers and other school personnel. Increased productivity has made possible the abundance of material things which affect modern standards of living. It enables the United States to finance whatever kinds of schools are needed.

High productivity and high living standards create new needs for education. To sustain productive capacity and to absorb the many unskilled workers replaced by new methods, it is necessary to prepare an increasing proportion of the population for jobs requiring more extensive educational background. Education has become the major stimulus to higher income. To keep high material living standards from impairing productivity and destroying important human values in our civilization, better general education for all becomes imperative.

Probably the most fundamental reason for variations in school quality found within individual states and within the nation as a whole is the wide range of differences which exist in the public understanding of education, its goals and standards. Another major contributing cause is the frequent lack of relationship between the educational task to be performed and the sources of local and state revenues to finance the undertaking. It is to this—the financial problem—that this article is directed.

THE EDUCATIONAL TASK

In recent years four forces have so strained

Why hasn't material abundance in a rising economy increased quality in education?

state and local resources for school finance that many localities have not achieved higher quality schools. Indeed they have had to struggle in order to maintain the quality previously attained; and some have suffered more qualitative deterioration than is generally recognized. These forces are (1) increased population, (2) a severe shortage of college graduates qualified to teach, (3) higher living standards and (4) inflation.

(1) **Increased Population**—In the United States, public elementary school enrollment has been rising at the rate of 4 percent per year; public high school enrollment is increasing at a rate exceeding 5 percent annually. Many suburban and other rapidly growing centers have rates of increase many times the average. Conversely, many cities and rural systems have only very slight annual increases or even decreases.

Because of the other three factors, a given percentage increase in enrollment may increase total costs by a much higher percentage. Each new pupil must be educated at the current cost per pupil. New buildings for added pupils cost two, three or even more times the cost of existing facilities. New debt service must be incurred at much higher rates of interest than prevailed not long ago. New books, equipment and furniture all cost much more.

The average growth in enrollment probably adds more than 8 percent per year to total school expenditures. In rapidly growing communities the percentage will be much higher than the average. This is due not only to the factors previously cited but also to the rising proportion of pupils in secondary schools where expenditures per pupil are higher than they are in the elementary schools.

(2) **Teachers**—Increased enrollments and greater

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demand for teachers, during a time when the supply of college graduates has been severely limited by the relatively low birth rate prior to the end of the war, forced teachers' salaries upward. Moreover, the changed and expanding economy has increased greatly the total demand for college graduates. The average beginning salary of college graduates in the economy has been rising at the rate of 8 percent per year. The average teacher's salary (somewhat below the average beginning salary for male college graduates generally) has been increasing at the rate of 6 percent a year. The implications for school quality as a result of these differences, are significant.

(3) **Higher Living Standards**—Schools require many services—custodial, maintenance, etc. Wage rates in the economy have been going up at the rate of 5 percent annually, reflecting both higher living standards and higher living costs. Since the latter is increasing only about 1 percent a year, the remainder may be attributed to higher living standards. Nevertheless, when schools employ persons they must pay wages high enough to provide for both factors.

(4) **Higher Prices**—Schools also must provide facilities and purchase a wide variety of goods used in the process of school operations. In recent years the prices paid for such goods has been rising at an annual rate of 1 to 2 percent.

EXPENDITURE PER PUPIL

If school systems simply had adjusted to the preceding factors as reflected in the typical budget, the current expenditure per pupil would have increased 6 percent without any improvement in school quality. The actual average rate of increase for the nation was a little over 5 percent a year. What then are the implications for quality education—nationally and in localities experiencing a more rapid rate of population growth than the average?

STATE AND LOCAL REVENUES

The gross national product has been increasing about 6 percent annually. Thus it can be seen that the schools could not have met the added cost of enrollment increase alone without taking an increasing proportion of the national product. Furthermore, even partially meeting the economic factors causing a rise in per pupil current expenditures for all pupils meant that the proportion had to rise even more so. The proportion of school expenditures to the gross national product increased from 2.5 percent in 1954 to about 3 percent in 1959. If schools had fully adjusted to the economic forces and had maintained or improved school quality the percentage would have risen much more.

This fact has created serious revenue problems for public schools. They will require new tax

sources or increased rates on existing tax bases as long as enrollment expansions, present economic trends and the urgent need for better schools continue. But the political and psychological blocks to new taxes and mounting tax rates will be significant at both local and state levels of government.

THE LOCAL TAX BASE

Generally the only tax base available for local school support is the property tax. School support from this source has been averaging an approximate 10 percent annual increase. This reflects the combined effects of increased enrollment and economic factors. Localities experiencing the greatest growth may have a yearly rate of increase of 20 to 30 percent in school taxes.

These facts hardly support the common assumption that the property tax is slow to adjust to economic growth. Property taxes recently and for many preceding decades have risen more rapidly than the rate of growth in the economy. Nevertheless, the question must be raised as to whether the property tax can continue to respond to uninterrupted growth in enrollments, rapid expansion of school population in suburbs, economic factors causing per pupil expenditures to rise, and the great need for school improvement in so many states and localities.

There is no generalization concerning property taxation which can be applied to all localities and to all states except that the tax differs greatly in economic importance, legal provisions and actual administration.

Because of wide variations in assessment practices and the lack of national data on full valuation for any year prior to 1956, it is impossible to measure the true growth in property values for the nation as a whole. In New York State, where good data have been available for the past five years, the annual rate of increase in school property taxes has been 12.5 percent. Five percent represents growth in the tax base by the addition of new property to the tax rolls and the augmented value of property on the rolls five years ago. The remainder of the yearly rate of increase (7.5 percent) represents a growing tax burden.

Although New York State is one of the highest three states in terms of property tax load, there is no evidence of general overburden as reflected in foreclosures, tax delinquency, business failures, business migration, curtailed construction activity or other trends. However, psychological resistance has been mounting although it is still limited to a small proportion of school districts. There is no doubt that the sharp annual increases, particularly in suburbs, are having serious effects upon some taxpayers at least.

Since real property in this state represents a smaller proportion of taxable resources than it

does in all other states, there certainly is a need for shifting part of the increased cost of schools to other tax bases. However, this need not exist in all localities (some have very low tax rates). No matter what is done the property tax base can be expected to assume increases proportionate to the real growth in values and to increased effort in the low tax units.

Data now available from the 1957 Census of Governments make it possible to compare the property tax base by states. The ratio of assessed valuation to the full valuation of non-farm residential property ranges from about 6 percent in South Carolina to over 58 percent in Rhode Island. In all but three states the figure is less than 50 percent. Similar differences exist for other classes of property.

The estimated full valuation of taxable property for the nation as a whole is about three times the assessed valuation. In New York and Rhode Island full valuation is almost double assessed valuation and in another group of states it is at least double (Connecticut, Delaware, Illinois, Maryland, Massachusetts, New Hampshire, South Dakota, Wisconsin). In four states full valuation is 10 to 15 times higher than assessed valuation (Arkansas, Idaho, Montana and South Carolina). In many others it is five to 10 times greater (Alabama, Arizona, California, Louisiana, Minnesota, Mississippi, New Mexico, North Dakota, Oklahoma, Oregon, Texas, Washington and Wyoming).

Low assessments mean that under the prevailing practice of basing tax and debt limits on assessed valuation, the full potential of the property tax for school support is being drastically restricted in almost all states (New York bases its tax and debt limits on full valuation; Wisconsin bases its debt limit on full valuation).

Another important fact now available is that the property tax base varies in importance from state to state. The range is very wide. In states like Wyoming, Utah, Idaho and Montana, property is the major factor in the economy. In states like New York, Pennsylvania, Massachusetts and Delaware it is a much smaller factor. Thus the degree of economic dependence upon the property tax varies considerably among states. There is little relationship between the property tax load and the significance of property in the economy of a state. States with service or industrial economies, like New York or Massachusetts, rely heavily upon the property tax base although it is not a major source of income. States with agricultural or natural resource economies—New Mexico, South Carolina and Arkansas, etc.—do not place too much dependence on the property tax base, although it is very important to their economies. Only 18 states exceed the national average in property tax load, but 12 of these are states in which property is not relatively important in the economy. Of the 12 states

with the lightest property tax load, over half regard it as a significant source of income.

Therefore, on the basis of these facts, one must conclude that property taxes could continue economically to expand in most states at an annual rate exceeding that for production generally, but not at a rate high enough to improve school quality. To maintain such a rate of increase will require (1) realistic local reassessments or state corrections of local assessments with tax and debt limits based upon full valuation, (2) a review of the economic importance of property within the various states and (3) elimination of small units of school government which still exist in many states.

Some of the increased school costs could be shifted to local non-property taxes. But the relief provided by even large yield taxes would be relatively small compared with the greatly augmented school costs of the future.

STATE TAXES

Over-all state tax collections have been rising at an annual rate of about 8 percent. This is somewhat higher than the rate of growth (6 percent) in the national economy. Expenditures of state funds for public school support are growing at an annual rate of 13 percent. Since local taxes for schools are increasing at the rate of only 10 percent a year, the demands on state revenues are 30 percent greater annually than local tax collections. Thus states have been increasing school support at a rate exceeding that for the increase in local tax collections. How long can this differential continue?

The bulk of state revenues are derived from consumption taxes and graduated personal income taxes. Both respond to the trend in personal income which has been expanding at 6 percent per year. State taxes have been growing faster than the tax base. Of course, these relationships will vary among states.

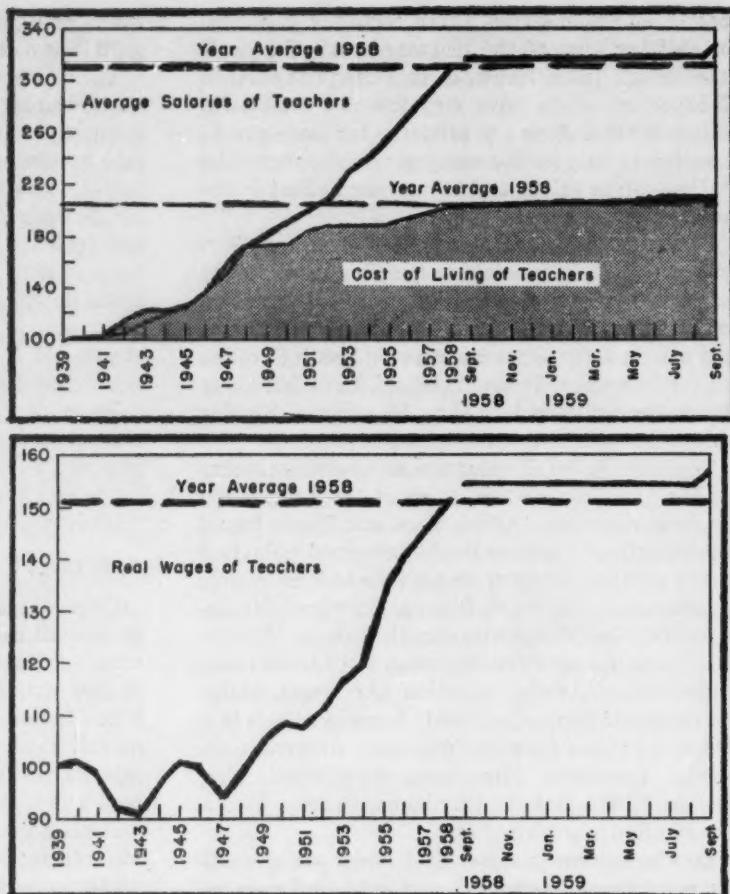
It is obvious that most states no longer can depend upon economic growth alone to provide the added taxes required for schools. They must impose new taxes or increase rates on existing taxes. Whether they will depends upon political considerations and such factors as interstate competition for residents and business.

If states do not respond to the forces causing higher school costs, the possible consequences are: School quality will deteriorate to an even greater extent; or the rate of increase in taxes will be greater than can be justified economically; or greater use of the federal tax system will be necessary.

If educational quality is to be maintained and improved, states will have to provide even greater increases in support than they have in the past or they must seek a much larger share of federally collected taxes for this purpose.

Teachers' Salaries and the Cost of Living

by HAROLD F. CLARK
Economic Analyst
Teachers College,
Columbia University



The index of the real wages of teachers rose during September to 156.0 (1939 = 100) from August's index of 153.7. For a good many years the salaries of teachers have risen more than the cost of living, meaning a rise in the real wages of teachers. The increase of the cost of living slowed down greatly during the past year, while teachers' cost of living increased only about 2 percent. This is a good record as compared with the past 20 years, during which time the average rise in the cost of living per year was 5 percent. Even so, a 2 percent rise is too much.

Salary increases for teachers in many communities have been running between 3 and 4 percent. It is too soon to be sure what the final increase will be for the entire country. The rise in dollar wages is somewhat less than it has been in recent years. Still, the rise in dollar wages is substantially above the rise of the cost of living; consequently this leaves an increase in real wages.

Teachers' salary increases have to be compared not only to the cost of living but also to rises in other fields and professions. Most other wage increases seem to be staying in the 2 to 3 percent range. However, it is well to remember that teachers' wages are still relatively well below the posi-

tion they occupied 20 years ago. It is possible, though, that teachers' wages may gain a little in relation to increases in other fields during the next year.

What other salary ranges can be compared with those of the teaching profession? This is a difficult comparison to make, since professions vary greatly in the average level of required ability and subsequent pay. Many occupations need able people, yet teachers' salaries are low compared to those of doctors and are high compared to those of nurses or librarians. But all of these professions require ability.

The problem in each community is paying enough to get highly competent teachers. This will depend partly upon the wage level in other occupations as well as the absolute level of wages. Each school board should have available some kind of relative wage index for comparable occupations in their community and nearby communities.

Community attitude toward the teaching occupation also can be extremely important, but it is clear that we will not get enough able teachers without an adequate salary plan. Part of the answer to what is adequate must depend upon salaries in comparable occupations.

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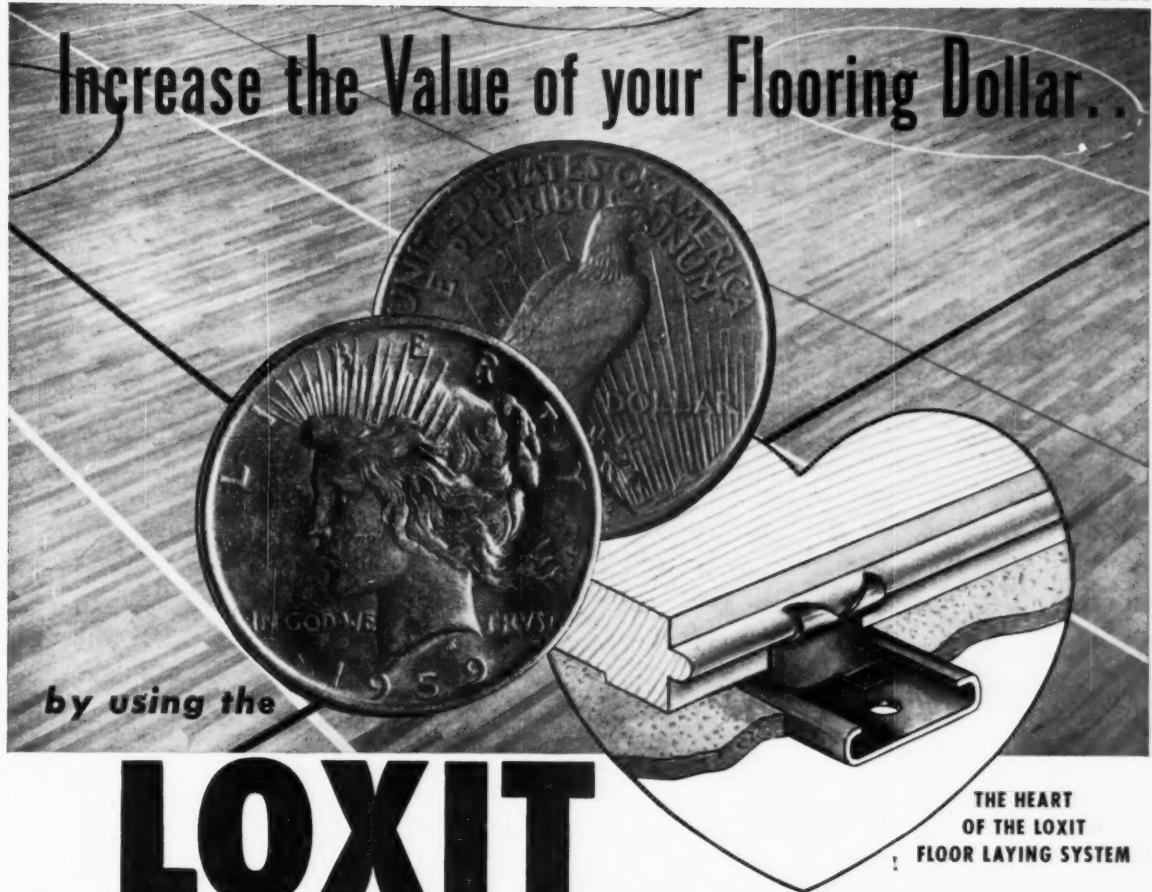
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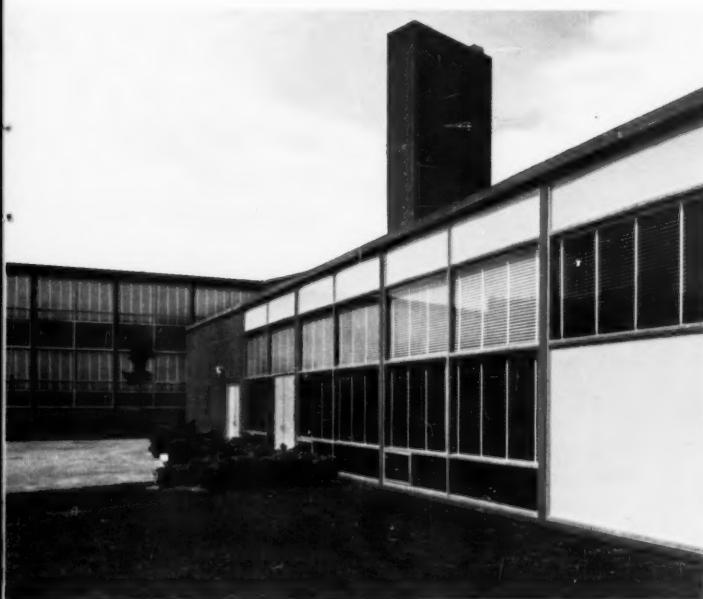


Architect: Warren H. Ashley, West Hartford, Conn. General Contractor: Tornabene Brothers Co., Newton Upper Falls, Mass.
Panel Contractor: The State Glass Co., Hartford, Conn. Window Fabricator: Hope's Windows, Inc., Jamestown, New York



If you're interested in bright, efficient school design, you would never forget a stroll through the streets and walks of the West Springfield Senior High School in Massachusetts. It's one of the most attractive and best equipped campuses in the country. And if you met any school board members, or the architect, or the contractor, you might hear how the colorful steel window walls saved \$95,000.

on this high school campus



The steel window walls are only one inch thick. They're strong, weathertight, and exceptionally light—so light that the builder was able to construct lighter frames and foundations . . . and save tons of steel and concrete. The walls were factory-assembled into complete floor-to-ceiling units that were delivered to the building site ready to be set in place. Erection was completed in days instead of months. The savings in labor costs and in building materials amounted to \$95,000.

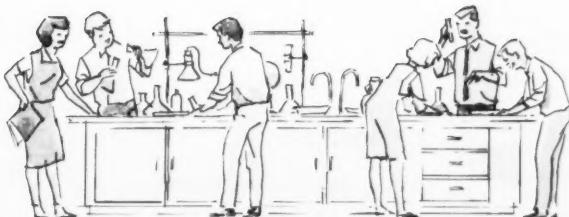
The steel window walls saved time and money—and space. Conventional walls would have been about twelve times thicker—at the sacrifice of floor space. Because steel window walls are so thin, they allowed 3½ per cent more classroom area.

This year, the West Springfield school is five years old, but it looks as bright and clean as the day it was opened. It will stay that way for generations because the porcelain-enamelled steel wall panels are practically maintenance-free. They will never have to be painted or refinished. They never fade or peel. An occasional wash—or even rainfall—keeps them mint-clean.

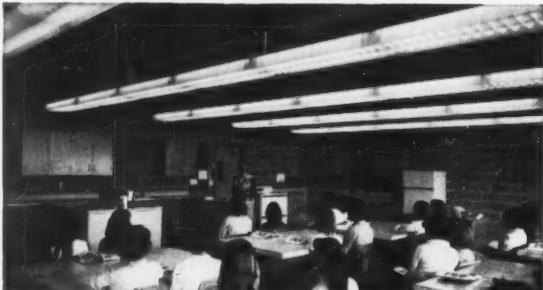
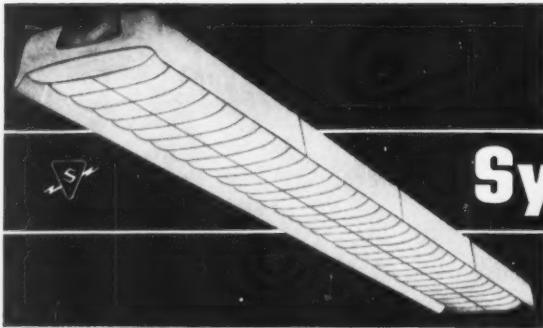
If you would like to have more information about steel window walls, write to United States Steel, 525 William Penn Place, Pittsburgh 30, Pa.

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USS STEELS FOR ARCHITECTURAL DESIGN
USS Stainless Steel • USS Vitrenamel
USS Structural Steel • USS Window Sections



USS **United States Steel**



GO MODERN WITH LIGHTING BY

Why You Should Always Consider Sylvania's SCOTT for School Lighting

T

ODAY'S alert school official looks at lighting fixtures from many angles when choosing equipment to illuminate new or remodeled classrooms.

He knows, of course, that cost is important. He also realizes that what he gets from the fixture in return is even more essential—items such as quality illumination; high efficiency; attractive appearance; simple maintenance characteristics. With increased emphasis on attractive classroom appearance, the capability of a fixture to blend with and add to the environment of learning is increasingly important.

All of these factors, plus the new low cost, help account for the growing popularity of Sylvania's Scott fixture.

Extremely attractive and efficient*, the Scott's smooth, clean lines enable it to fit with a wide range of classroom interiors (as illustrated). The one-piece, all-plastic shield assembly comes in a choice of three tints . . . white, eye-rest green or coral . . . offering the opportunity of providing a cool or warm atmosphere, if desired.

Highly diffused illumination is obtained with the Scott's wide, luminous sides, resulting in soft, even lighting with a minimum of shadows and glare. Other important lighting characteristics found with the Scott are excellent shielding to protect eyes from direct view of the lamps and low, comfortable contrasts between the fixture and surrounding areas.

These features show you why Sylvania's Scott has proved the ideal fixture for so many schools. It could be the answer to your lighting problem. Find out by writing today for full information.

SYLVANIA LIGHTING PRODUCTS
A Division of SYLVANIA ELECTRIC PRODUCTS INC.
Department 59-9
One 48th Street, Wheeling, West Virginia

*So efficient that in many classrooms less Scotts are needed to meet planned lighting requirements.



SYLVANIA

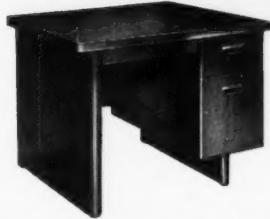
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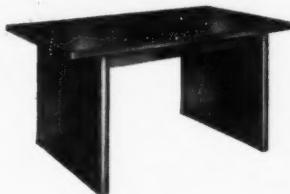
FLUORESCENT LIGHTING FIXTURES AND SYSTEMS • BEST FIXTURE VALUE IN EVERY PRICE RANGE



Immediate Acceptance . . .



New Lyon 42" Desk—same finish, same heavy-duty linoleum top, same welded construction as the Lyon 60" desk. Modesty panel. 42" wide, 30" deep, 29" high.



New Lyon 60" Table—companion piece to the 60" desk. Heavy-duty linoleum top. Modern panel-type legs have adjustable feet. Top overhangs for comfortable seating. 26" drawer.

and enthusiastic reception of the new Lyon Office Desk by scores of schools nationwide. And for good reason! Never before has *so much desk quality been offered at such moderate cost*. The Lyon 60" desk combines smart, streamlined styling with quality engineered features. Welded construction is used throughout this handsome, gray-finished desk. Heavy-duty linoleum top is trimmed with beveled stainless steel. Other quality features—

- Skid-type base with adjustable feet for easy leveling
- Interchangeable pedestal drawers
- Large file drawer can be used in top or bottom position
- All drawers operate smoothly on nylon glides
- Modern recessed drawer handles for sleek, smooth beauty
- Modesty panel on all desks

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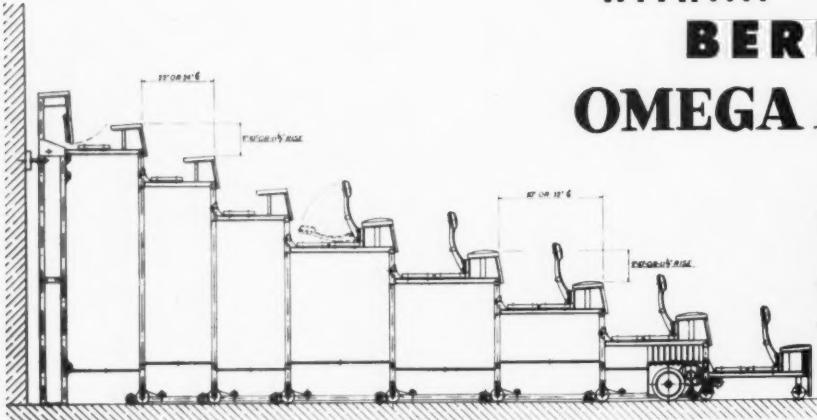
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WITH....

BERLIN OMEGA EZ-A-WAY



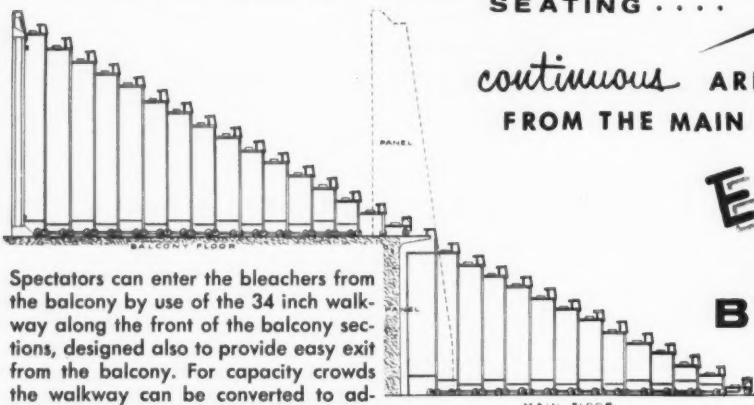
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The modern way to operate bleachers . . . Let Electricity do the Work. BERLIN OMEGA EZ-A-WAY is the ultimate in mechanical folding bleacher operation . . . may be used on all types of bleachers, including reverse fold, delayed action, balcony installation. Easy and simple operation . . . any school personnel can operate them . . . no adjustments needed for lifetime of installation. Find out today what electrified bleachers can mean to your seating setup.

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continuous ARRANGEMENT OF SEATS
FROM THE MAIN FLOOR TO THE BALCONY

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Spectators can enter the bleachers from the balcony by use of the 34 inch walkway along the front of the balcony sections, designed also to provide easy exit from the balcony. For capacity crowds the walkway can be converted to additional seats, so that all balcony space becomes spectator seating. When closed there is continuous face so that on occasions only the bleachers on the main floor need be extended. These continuous design EZ-A-WAY bleachers may be equipped with the OMEGA drive unit for simple, easy operation.

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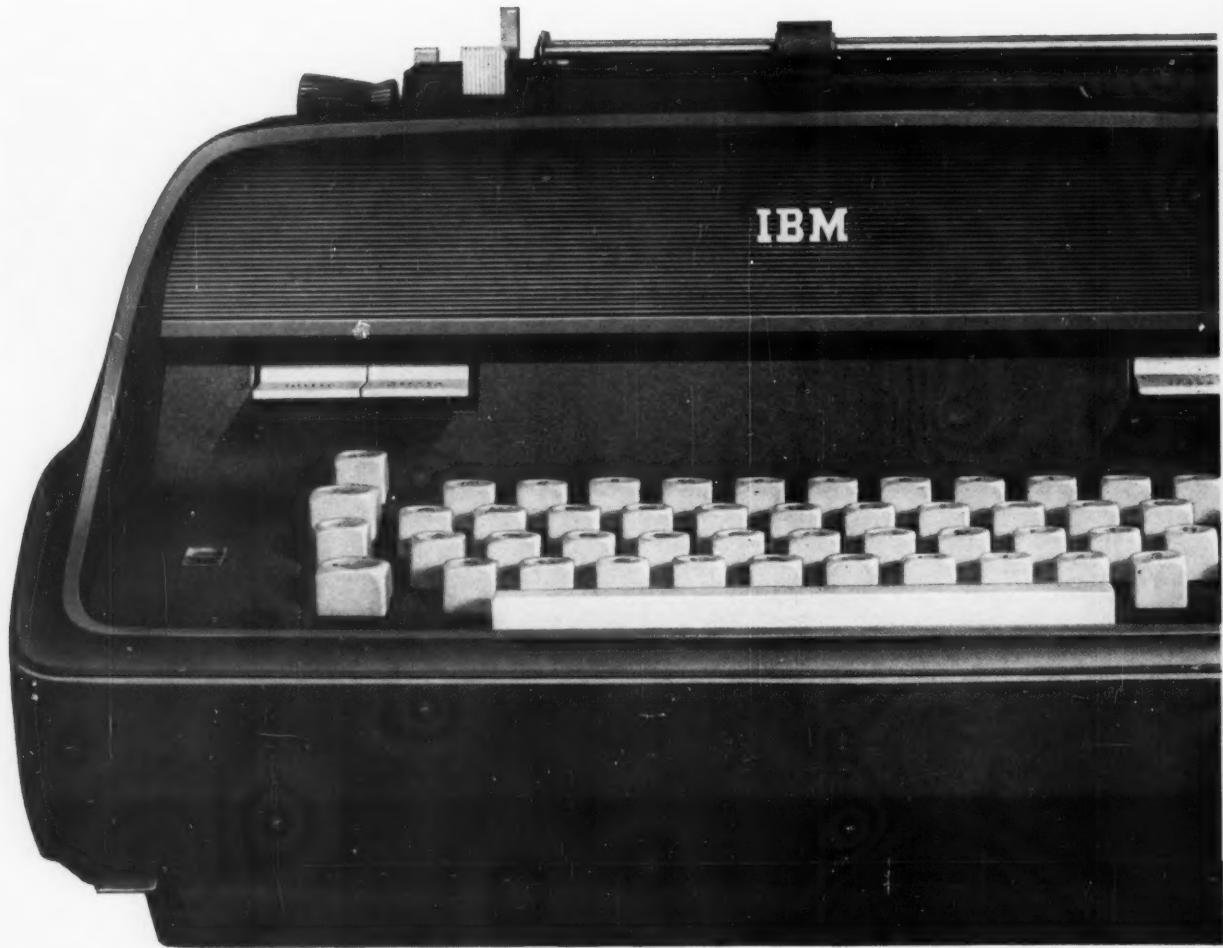
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Its clean, contemporary look and ease of operation stimulate in the student a desire to learn. Its 28 advanced engineering features help him achieve greater speed and accuracy, with better typing habits, far more quickly. Its durability and dependability result in minimum down time and maximum student use. From any point of view—teacher's, student's, or administrator's—this is today's finest teaching typewriter.

IBM[®]

Stainless Steel dispensers cut milk costs 25% at University of Wisconsin cafeteria

Mr. Douglas C. Osterheld is the Business Manager and Associate Director of the University of Wisconsin Union building. When the Union's new cafeteria and kitchen were built, he planned the layout and specified the equipment.



"**You see a lot** of Stainless Steel here because it is the most sanitary material to use around food. It can't chip or peel. It's strong. It's easy to keep clean because it resists pitting and corrosion. It's an economical material because it is so durable."



"**Our Stainless Steel milk dispensers** are a good example of why this metal is a real boon to cafeterias. Before we had the dispensers, we had to handle thousands of individual units. There was a great deal of work involved."



"**We cut the labor of milk handling**, were able to increase the portion size, and reduce the cost of that portion when we installed the self-service dispensers. The dairy delivers the milk in bulk cans that go right into the dispensers. We have no problems with storage, since the refrigeration space required for the bulk cans is materially reduced."



"**With all the advantages** of Stainless Steel dispensers, you might expect this system of milk handling to be more expensive. It's actually cheaper. With the dispensers we can buy our milk at the bulk price—and it's about 25% lower."

If you would like to have more information about Stainless Steel milk dispensers, write United States Steel, 525 William Penn Place, Pittsburgh 30, Pa.

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United States Steel

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from *Smithcraft* imagination in lighting

QUALITY CRAFTSMANSHIP CAN COST YOU LESS!

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Smithcraft FEDERAL



Sturdy Smithcraft construction meets today's trend to economy with the new Federal, a quality lighting fixture that offers high-level illumination, long-term life and new ease of maintenance at a new, lower-than-ever cost! Federal meets modern school requirements, provides protection for young eyes. With steel or plastic sides and shieldings providing $25^\circ \times 35^\circ$, $35^\circ \times 45^\circ$ or $45^\circ \times 45^\circ$ cutoff. Louvers have built-in safety-lock — cannot be inadvertently knocked off.

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Test your own school lighting! FREE! Smithcraft Lightester grades your lighting in minutes — points out areas where lighting may be insufficient. An accurate guide to good lighting. Write today for your free Smithcraft Lightester.

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+ Light-conditioning by *Smithcraft* — America's finest fluorescent lighting



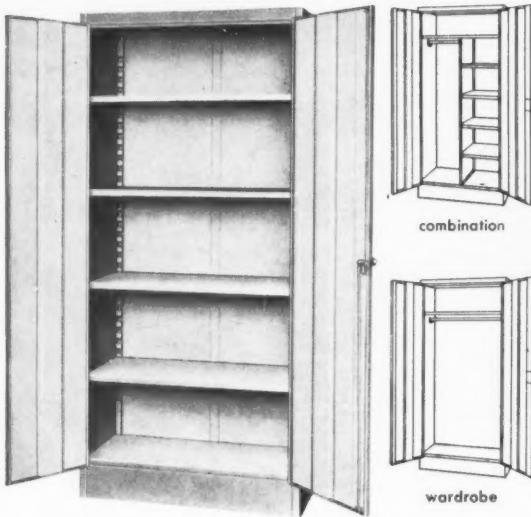
open-face... swinging-door... sliding-door

BORROUGHS CABINETS

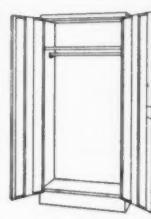
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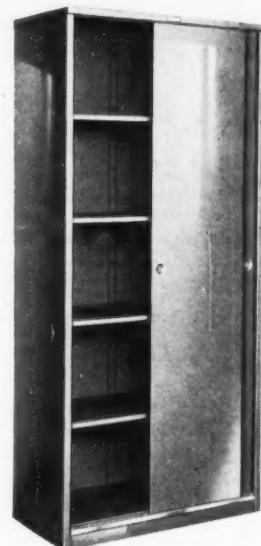
all cabinets 36" wide



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facts regarding cabinets

OPEN-FACE CABINETS in heights of 29", 42", 78", 84"—depths of 12" and 18". Sliding shelves are adjustable without tools, nuts or bolts.

SWINGING-DOOR CABINETS in 2 heights—42", 78"—2 depths—18", 24". Central handle with Yale & Towne built-in lock. Doors have 3-point latching and swing completely open for full accessibility. 78" Cabinets in 3 styles—storage, wardrobe, combination. Shelves adjustable without tools.

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All cabinets 36" wide.



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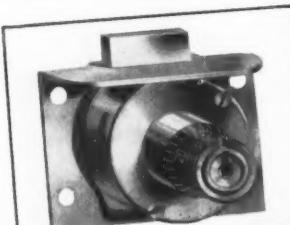
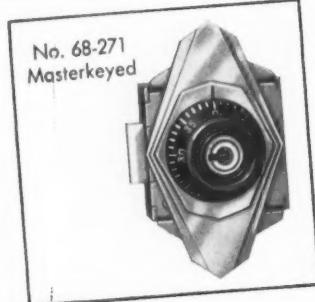
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TO DEPENDABLE LOCKER SECURITY

Positive locker protection is a matter of sound engineering and quality components in the locks you buy. There are no short cuts . . . no substitutes! That's why schools everywhere praise the dependable, long-term performance of National Lock combination locks. (Check the quality features listed below.) Simplified re-setting of combinations and a complete system of locker control make National Lock combination locks mighty convenient to use. Investigate the other advantages, too.

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Teacher saves steps; she answers calls from any point in room. Call from principal is announced by bright red privacy light. Teacher can also call principal.



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Executone provides complete communications, classroom privacy

Caney, Kansas, schools get all the many features of expensive console sound systems with simplified, low-cost Executone intercom. This inexpensive, all-purpose system saves time and energy for teachers and principal, increases administrative efficiency. Schoolwide announcements can be made from the principal's desk. School programs, recorded music, speeches, special events, emergency dismissals, every form of sound system transmission can reach all school areas, as well as individual classrooms.

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More time for teaching! Teachers like the system. It saves them steps, time and energy . . . so students benefit, too! Find out what Caney schools have learned . . . how Executone School Intercom can improve *your* school administration. Just send coupon for more information.

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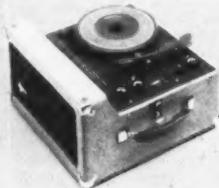


The most versatile, most rugged equipment of its kind, the Newcomb AV-164V-LC8 is a complete combined portable transcription player and public address system. *In addition* eight pairs of pin jacks for headphones are built into the control panel for language study, library use, and group-within-a-group listening. Eight pairs of phones, brightly colored red and black to identify them as public property, are supplied in a compartmented case. Cost of the headphones is so low that replacement is usually less expensive than repair. A jack for microphone permits a student to listen to his own pronunciation. There are separate volume controls for mike and phono. The transcription player features a new four speed, variable speed, American-made motor, heavy turntable, deep-ribbed rubber record mat, new plug-in ceramic pickup cartridge, and hideaway compartment for power cord. The new 12 watt Bi-Coupled® amplifier is carefully matched to a large 12" dual cone speaker for highly efficient coverage. System is transformer powered for maximum safety, best performance. Ruggedly built for years of service... Newcomb audio equipment is truly an astute investment in lasting quality. Write for free bulletin describing the AV-164V-LC8.

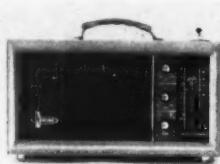
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Newcomb Professional Model SM-310 Stereo Tape Recorder is cybernetically engineered for intuitive operation.



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CALL HIM NOW (and ask him how to pre-condition your gym floor just before dances) The Hillyard Maintaineer is your consultant on floor care.
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Please have the Maintaineer in my area get in touch with me. No charge,
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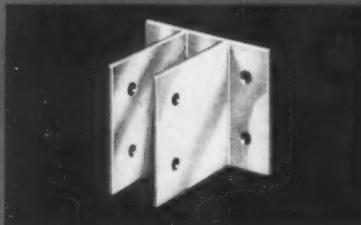
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Institution.....

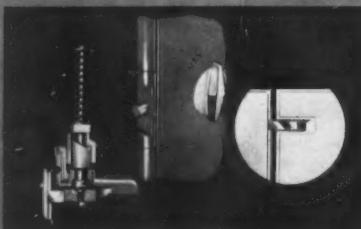
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City..... State.....

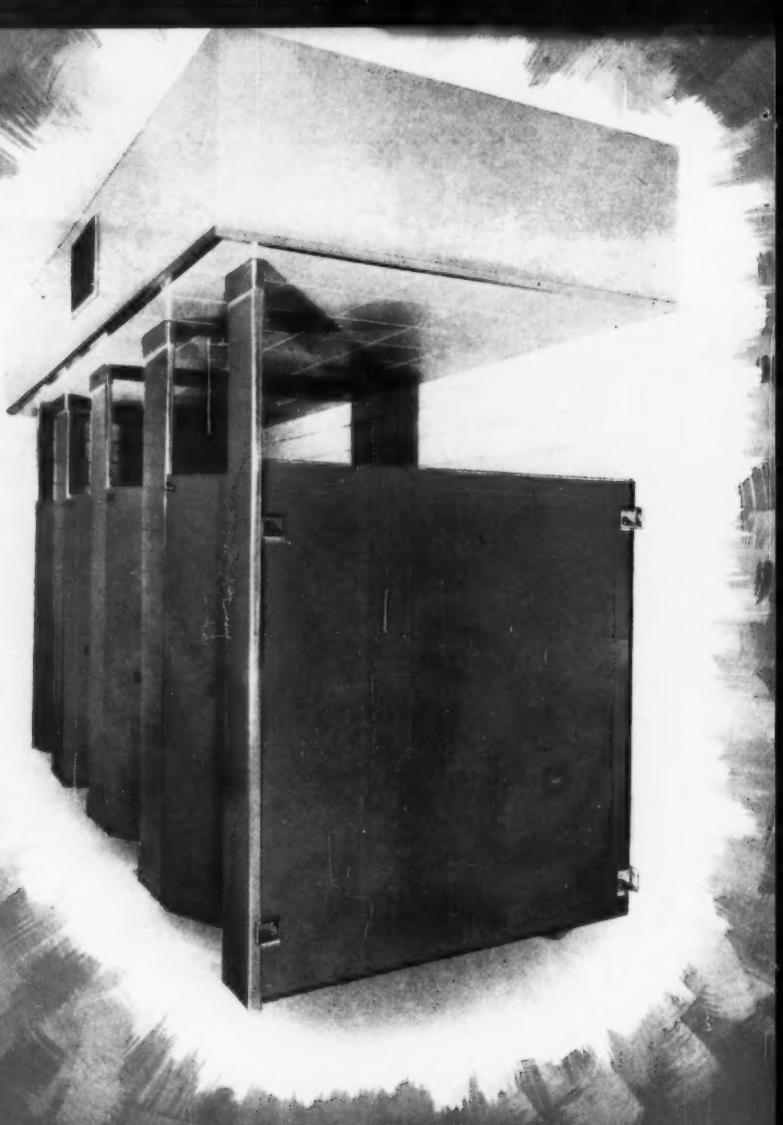
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Lingua TRAINER

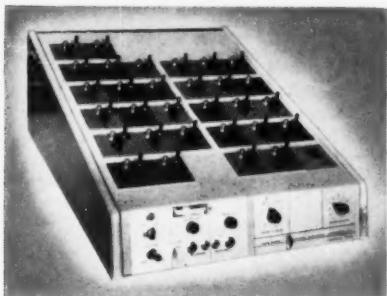
"It's as easy to use as flipping a switch!"

T.M.

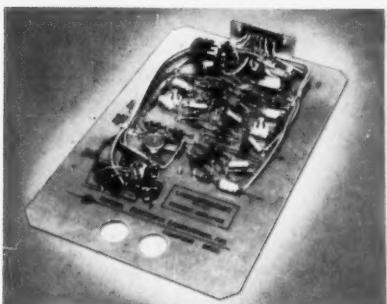
ELECTRONIC LANGUAGE LABORATORY SYSTEM*



The Remote Control Cabinet (top half shown) contains all electronics and tape recorders that are normally placed at each student position.



The Teacher's Console contains controls for tape recorders, channel selection, monitoring, and for making master tapes.



Transistor Amplifiers for each student position are mounted with plug-in terminals for quick removal and easy replacement.



At last, in the LinguaTRAINER, a system has been technically and pedagogically engineered to meet the needs of the language teacher in instructing an entire class, several groups of the class simultaneously, or individual students — with minimum effort and optimum results!

The LinguaTRAINER is easy to operate, even for the least mechanically inclined person. As can be seen from the picture above, the student has no mechanical operations to perform, and only one switch to manipulate. The entire class period can be used, therefore, for teaching and learning. Tape recorders are located in a remote control cabinet, and provide record and playback for every student. Tape cartridges require no threading of reels, no splicing, no rewinding, and can be used again and again by successive classes without rehandling.

High fidelity sound reproduction, an important factor in language work, is featured. Most important, anyone who can flip a switch can operate the LinguaTRAINER successfully.

Write to Mr. Bruce Boal for LinguaTRAINER Brochure

Patents pending

SCIENCE ELECTRONICS, INC.

195 Massachusetts Avenue, Cambridge, Massachusetts

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Some of the purchasers of the LinguaTRAINER are: Adelphi College, Brown University, California Institute of Technology, Choate School, Frederick High School, Gettysburg College, Masconomet Regional High School, Massachusetts Institute of Technology, Milton Academy, Northwestern University, Palo Alto Junior and Senior High Schools, Thayer Academy, University of Oregon, U. S. Air Force Academy, George Washington University, Williston Academy, Wilmington High School, Worcester Academy.

NORTON'S PROVED DEPENDABILITY DICTATED CHOICE OF DOOR CLOSERS



ARCHITECT: HARRY T. MAC DONALD, A.I.A.
CONTRACTOR: STIGLBAUER BROTHERS

New Senior High School in Downey, Calif., Has a Norton Door Closer on Every Door

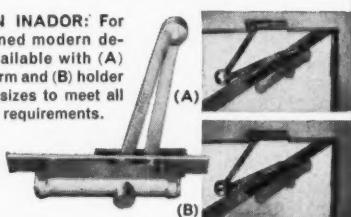
Ruggedness is a prime requisite for door closers in any school attended by over 2,000 students. This need has been satisfied in the distinctive new Senior High School at Downey, Calif. ...and also the new West Junior High School. All doors in both schools are equipped with Norton Door Closers. The choice was influenced by the fact that thousands of Norton Door Closers are still in daily use in some of America's best-known public buildings after serving continuously 30 years and longer. For fully illustrated data on these and other Norton Door Closers, including important new models, consult the current Norton catalog #57. Write for it today.

NORTON® DOOR CLOSERS

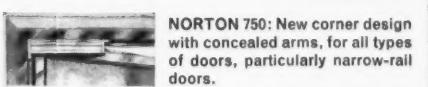
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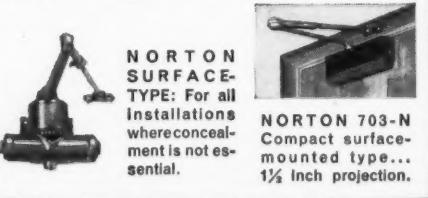
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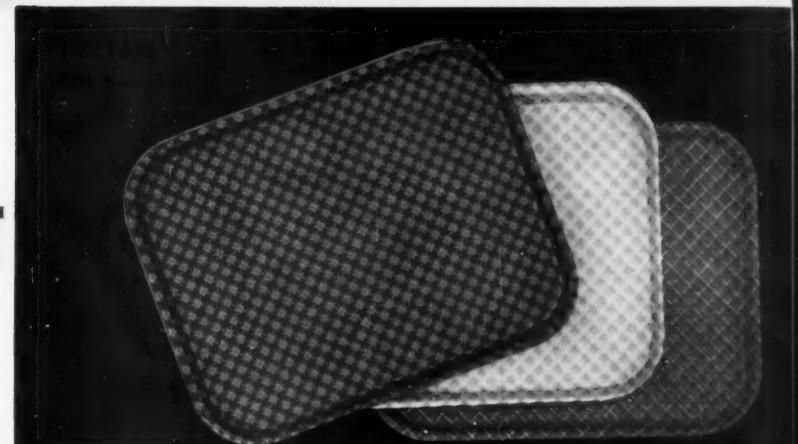
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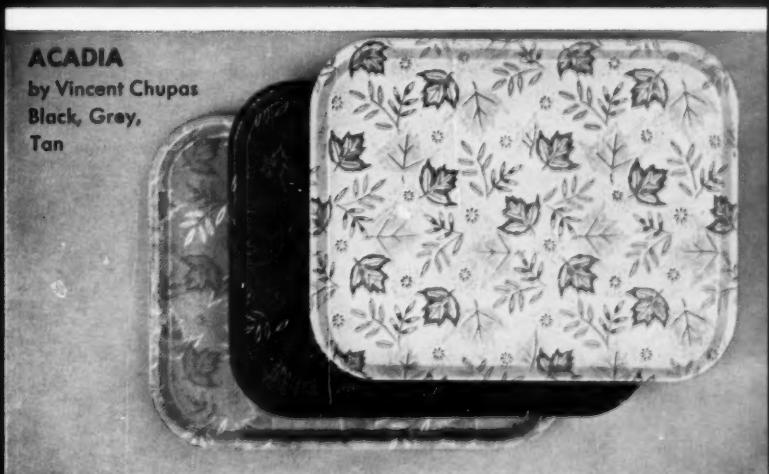
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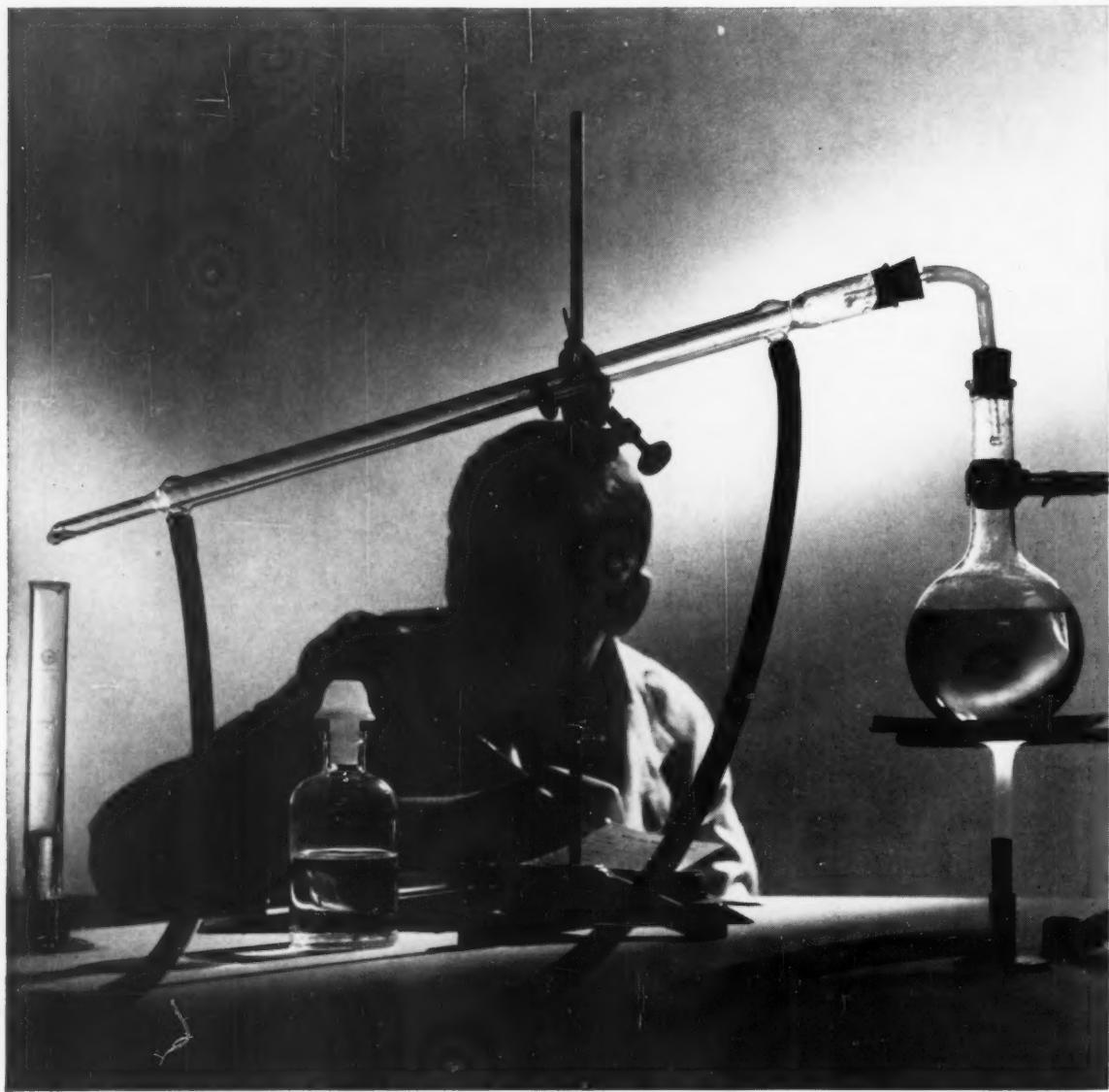
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PUPILS AND BOUNDARY LINES

BUT, DAD, why do we have to go there to school? No one from around here ever has! I like our school, and besides, if we have to go there I can't get any more math, and how'm I going to get into Tech without more math? They're just trying to keep their old school alive, and we have to suffer because it's in our county . . ."

This boy and his neighborhood friends had always attended a school which, though in the adjoining county, was only two miles from the neighborhood. It was in the community where their families attended church, did their shopping and found most of their amusements. Now the board of education had assigned them to a school in their own county-district, but it was much farther away from their homes. The board's reason was the very one the lad cited—to keep the latter high school alive awhile longer. The problem is not a simple one to solve. Chances are strong that the patrons will square

off in a battle or two before normalcy is restored.

One source of school boundary problems is the kind of geographic and physical features serving as district boundary lines. As maps show, these include such demarcations as shore lines and center lines of creeks, rivers and lakes; tops of ridges and bottoms of valleys; main roads and cowpaths; railroad rights-of-way; parallels of latitude and longitude; state boundary lines; and lines apparently drawn simply to connect two points on a map. Added to the more or less natural features are the man-inspired trouble breeders—boundaries drawn to include someone's home or property or to include industrial plants and other potential tax sources or, contrarily, to assist the unscrupulous in the evasion of school taxes.

Another factor is the simple passage of time. Districts which were adequate when the horse, railroad or trolley were the principal means of

by W. A. STUMPF
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Durham, North Carolina

transportation may no longer be satisfactory in size or geographic configuration. In rural areas the mechanization of farming has thinned the population so much that, with modern roads and school buses, the need for geographically small school districts has virtually disappeared. Many county lines, established when it seemed necessary that these boundaries be approximately a day's buggy ride from the county seat, are now obsolete; in fact, improved administration in government and education points not only toward the desirability of merging school districts but also to the merging of counties, however slow the progress in this direction may be.

Grass-is-greener problem

As school officials are well aware, no matter how carefully a boundary line is placed, someone living near it will want to send his children to a school on the other side. Why? For many reasons, most of them quite legitimate. The school "over there" may be nearer than the school in his own district, or better, or both. Economic and social life and community interests often center in a locality lying just across a district line rather than in the direction of the "home" school, and the boundary-line pupils generally will want to go—and they should go—to the schools in the place where the common interests focus. In a specific instance, an attempt is at this moment being made to return a group of pupils to the home school. Only one pupil has thus far returned. The rest are not likely to do so, short of a court order. The home school is not *their* home school, and mere boundary lines or assignment by the school board can not make it so.

Where teachers are allotted by states on the basis of average daily attendance or similar devices, and especially if the base salaries of these teachers are paid from state funds, school officials often try to capture as many pupils as possible to bolster the average daily attendance of their districts. Such action by boards is hardly surprising in light of the fact that officials' salaries, capital outlay and other elements involving state

aid may be more or less dependent upon the number of pupils attending.

Despite obstacles placed in their paths by some school officials, boundary-line pupils and their parents persist in wanting to patronize the schools most convenient to them. Patrons insist that traveling perhaps ten miles to a "home" school that is no better than the one two miles away but in the next district is nonsensical, a waste of children's time, and a flouting of pupils' safety if a short trip is admittedly safer than a long one. The school board's view, on the other hand, is that if it is expected to provide facilities and staff for all pupils in the home district, they ought to attend the district's schools and not go elsewhere. Otherwise waste is almost certain. Here, too, the logic of the argument seems unassailable.

Friction between school boards over boundary-line pupils is not uncommon. As an example, not only may District A accept children from District B, but it may actively recruit them by encouraging its bus drivers to pick up District B children living near the boundary line who for any one of several reasons ranging from a shorter ride to a better school program prefer to attend the District A school. District B officials find themselves hamstrung practically if not legally, so they raid some of District A's pupils. Eventually both boards may wink at the situation, with the boundary-line pupils gaining by indirection what the boards refused to grant directly. These problems, it should be said, are likely to be more frequent and acute in rural districts; however, considerable friction occurs at times between rural and city districts in connection with children in the so-called fringe areas.

More laws not the answer

What means for solving boundary-line problems are there that administrators and boards may apply? How can the interests of pupils, parents, taxpayers, teachers, administrators—in short, the entire public—be safeguarded with as little hardship as possible? Though the answers to these questions are not easy or uniformly

applicable, guideposts may be erected to indicate their direction.

"Let's pass a law" as a sort of blanket solution to the whole galaxy of problems becomes upon closer examination a poor answer, for some of the present boundary-line difficulties are the outcome of laws no longer appropriate. True, some new legislation will doubtless be required, but it will be corrective and remedial rather than merely additional.

Need public confidence

A second guidepost indicates that the local superintendent and the district's board of education must be the leaders in solving boundary-line problems, and in doing so they must be concerned as much with human and educational relationships as with legal and financial matters. Unless they have established themselves in the confidence of the public and their staffs, the going will be rougher than it otherwise would be.

The most effective way to solution is to apply to the problems a dispassionate, objective assessment of the facts, including their human, educational, financial and material aspects.

For example, if a school is dying, and only those pupils go to it who are forced to or who live so close that there is no alternative, the first step must be to find out what ails it. If it is an inadequate plant, it can be made adequate; if it is the program, staff or administration that is found wanting, correction will take somewhat more time and effort. But the superintendent and the board must be willing to act to remedy the deficiencies revealed by the study of the facts.

If boundary-line pupils and their families are actually members of another community—a community which has its roots in the adjoining school district—re-districting may be the solution. If changing the district boundary is difficult under present laws, the local school people may have to work for legislation to abolish the rigidity of district lines, especially those that serve also as the boundaries of civil units such as states, counties and cities. Some specific situations may be adjusted by

The problems growing out of district boundary-line situations may be grouped, with some overlapping, as follows:

1. When there is unequal breadth or quality of the programs of "competing" schools in adjoining districts.
2. When there is violation of community boundaries, which are not drawn legally but nevertheless exist.
3. When a given district, because of its size or population, is no longer appropriate or effective for its purpose.
4. When state laws regulate the allocation of teachers, salary bases and the like.

local legislation; it would, however, probably have a more lasting effect if all laws and regulations involving district boundaries were re-examined to find what general legislation might be appropriate under present conditions. At any rate, piece-meal adjustments which may violate community lines almost certainly will cause immediate trouble and result in ultimate failure, especially in rural areas.

Despite much school district reorganization in recent years many districts are still unsuitable for school administrative purposes. Not only may they still be too small, but by following county or other civil boundaries they may cut through communities for no logical reason. Here the school man is again forced with a problem requiring both present and long-range solutions. For the immediate future, the answer seems to be to make the best adjustment that the facts indicate, though such a solution may put a strain on self interest if the administrator is likely to suffer financially as a result. For the long term, local school men will have to reach agreements among themselves, then convince the local public and the state educational and political officials of the need for corrective legislation, and follow through until it is enacted. Here state education associations also may help.

The school which is dying for want of pupils presents a problem not easy to solve. An example is a rural school in an area where the farming has become so highly mechanized that the supporting population of the school is depleted. This problem is especially acute at the high school level, and it concerns an attendance area rather than an entire district. The problem can't be solved by forcing children from boundary-line neighborhoods to attend it or even modernizing its curriculum or plan. The most effective long-run solution here is consolidation with one or more other schools.

When ADA determines salary . . .

What a school leader will do when his salary is determined partly on the basis of the number of pupils in average daily attendance or some similar measure is in itself a problem, for he may lower his salary if he recommends what may be best for the boundary-line pupils. Perhaps the way out of this dilemma is for the administrator to find his reward in his right action, hoping that his good judgment will ultimately be recognized and rewarded. Granting this to be idealistic, still, the ideal has proved itself the most practical often enough to present it as the correct solution to those with enough fortitude to adopt it. Also, local administrators whose salaries depend

partly on ADA might discover a better measure for payment and work for its adoption.

No school leader, however ethical and forceful he may be, can arrive at lasting solutions to the problems created by boundary-line pupils unless the law on the matter is benign rather than rigid in its requirements.

Provisions of a benign law

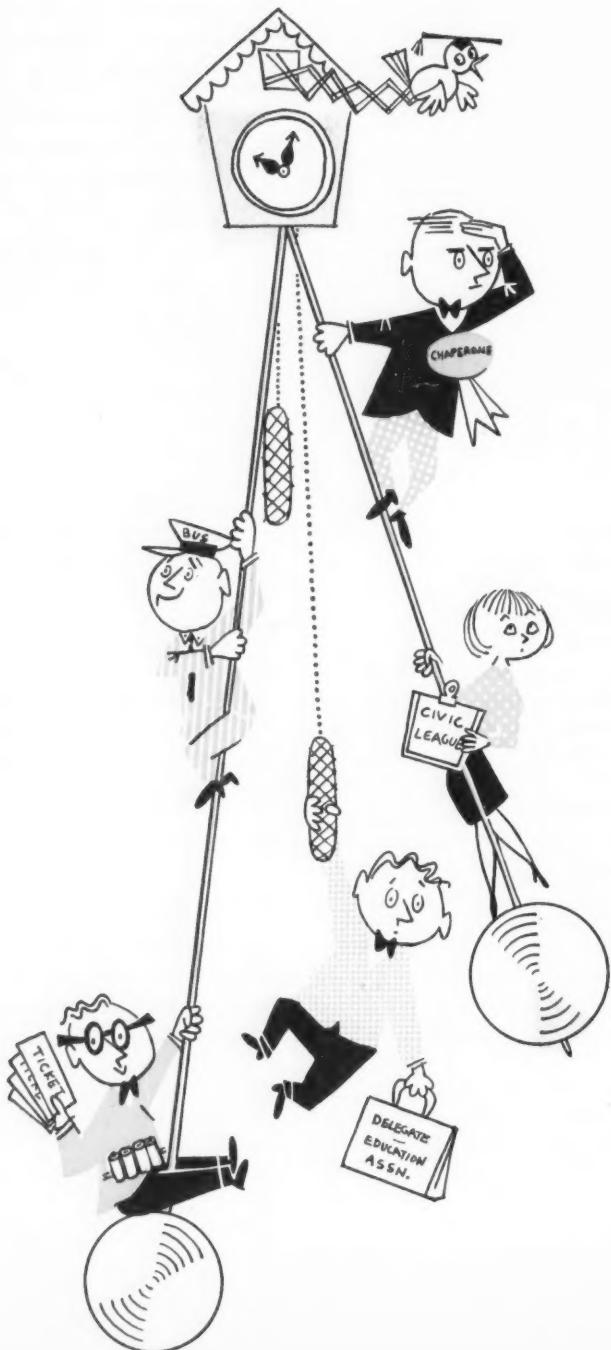
A suitable law should include provisions that: (1) all pupils within a specified distance from a school in an adjoining district may attend it virtually with no restrictions; (2) that the receiving board may not reject the pupils and the releasing board may not obstruct their leaving;* (3) that other pupils who may wish to attend a school in an adjoining district might do so with the consent of both boards; and (4) that in the event of a dispute the pupils or either of the boards affected could take the case to an umpire such as the chief state school officer or the state board of education. The law should also require an automatic referendum within a stated period to permit voters in a fringe area that has been absorbed into a city to decide whether or not they wish to join the city school district, and this vote should be mandatory and without the consent or approval of either the rural or the city board. Rural-city boundary-line problems, especially in the semi-county unit states often develop to alarming proportions when there is rivalry over pupils and financial resources.

In some instances, of course, boundary-line problems are merely symptoms of more fundamental maladjustments. The solutions stem from a frank facing of the facts. A necessary implement to the solution is a law or regulation that provides an avenue of appeal when opposing minds react to a problem without meeting on its solution.

* Georgia has such a law, though it is not a long step in the desired direction. (*Code of Georgia, Annotated*, Chapter 32, Section 938.) See also: *West Virginia Code of 1949*, Article 5, Paragraph 1777; *Casto v. Upshur County High School Board*, 94 W. Va., 513, 519-119 S.E. 470; and *Code of Laws of South Carolina, 1952*, Chapter 21-847, 149-151.

HOW MUCH TIME FOR TEACHING?

by THORWALD ESBENSEN



IF YOU WANT to "get ahead" in the teaching profession, spend less time teaching.

This advice is not as foolish as it may sound. Classroom teachers often find it advantageous to spend a good share of their already meager class preparation time doing things that have little, if any, connection with their daily job of teaching English, chemistry, history, etc.

Yet, this diversion of attention from lesson planning and other classroom work into non-instructional channels is normally in behalf of worthy purposes. It would be unfair to assert that these compelling pressures for extra-curricular involvement should be condemned summarily.

Certainly, the effort that a teacher puts forth in concert with others to help achieve various community goals cannot be dismissed as unimportant. Despite the banality of some forms of community association (indeed, is there any organization that does not have its trivial aspects?), membership in civic groups of one kind or another may enlarge the opportunity for making a contribution to the public good. Similarly, joining and taking an active part in local, state and national education associations is one way of increasing the influence of the teaching profession—surely, a defensible aim. And, of course, there are the many out-of-class school duties of teachers: chaperoning school parties; selling tickets at games, plays and concerts; riding buses to and from school func-

Mr. Esbensen is coordinator of secondary education with the Humboldt County, California Public Schools.

The teacher knows that favor with his administrators may depend more on the extent to which he takes part in community affairs than on the amount of teaching skill he brings to the classroom.

tions; planning PTA programs; and so on.

The trouble with these things is not that they are bad. On the contrary, all of them are very good. The difficulty is that teachers who engage in these activities must do so at the expense of the invariably too small amount of time available for their own instructional preparation. (I am assuming that teachers should not be asked to cut into whatever time they may need for discharging family and other personal responsibilities.)

The situation seems likely to persist as long as the following conditions obtain:

Most boards of education and school administrators would probably agree that what goes on in the classroom is the crucial measure of a teacher's value to a school system. Moreover, these same authorities would, I think, admit that teachers generally have class schedules that do not allow enough time for correcting papers, planning lessons and studying the subject matter to be taught. However, hand in hand with these beliefs commonly goes the expectation that any teacher really worth his salt will bear, without complaining, the burden of extra-curricular school duties, and will give, with good grace, whatever time it takes to be a useful member of various civic and professional organizations. Inconsistent? Yes. But, there it is, nonetheless.

A particularly interesting feature of this picture is that the perceptive teacher who wishes to move onward and upward in the profession is usually well aware of what is expected

of him. He knows that, when the chips are down (unless he is truly incompetent), favor with the board of education, the building principal and the superintendent of schools may depend more on the extent to which he takes part in community affairs, for example, than on the amount of professional skill he brings to the classroom. Understandably, he regularly elects to play the game.

In any case, how do you measure excellence in teaching? An adequate answer to this question remains to be found. There is a standing danger that, instead of trying to get at what we want to measure, we will settle for whatever we can measure. Enter here objective tests to measure student progress and academic credits to measure teacher preparation. I am not, I hasten to add, opposed to the use of objective tests in the classroom or to the earning of formal "fish eats," even of the Saber Tooth variety. In my English classes, for instance, I use two forms of the Iowa Silent Reading Tests (Advanced). I also whole-heartedly approve of salary schedules that encourage teachers to continue their formal education. The point is that such devices have only limited usefulness. There is no substitute for the old-fashioned essay, on the one hand, or for the love of learning, on the other.

It should not be supposed that school authorities have been insensitive to the problem of insufficient class preparation time, or inconsiderate of the need for re-affirming the primary importance of the teacher in the classroom. Increasingly, proposals have been advanced for easing the clerical duties of teachers.

And different ways of freeing teachers from their essentially uncreative study hall chores are continually being explored. Most fortunate of all is the fact that Russia's space satellites appear to have guaranteed a durable interest in pursuing the intellectual goals of American education.

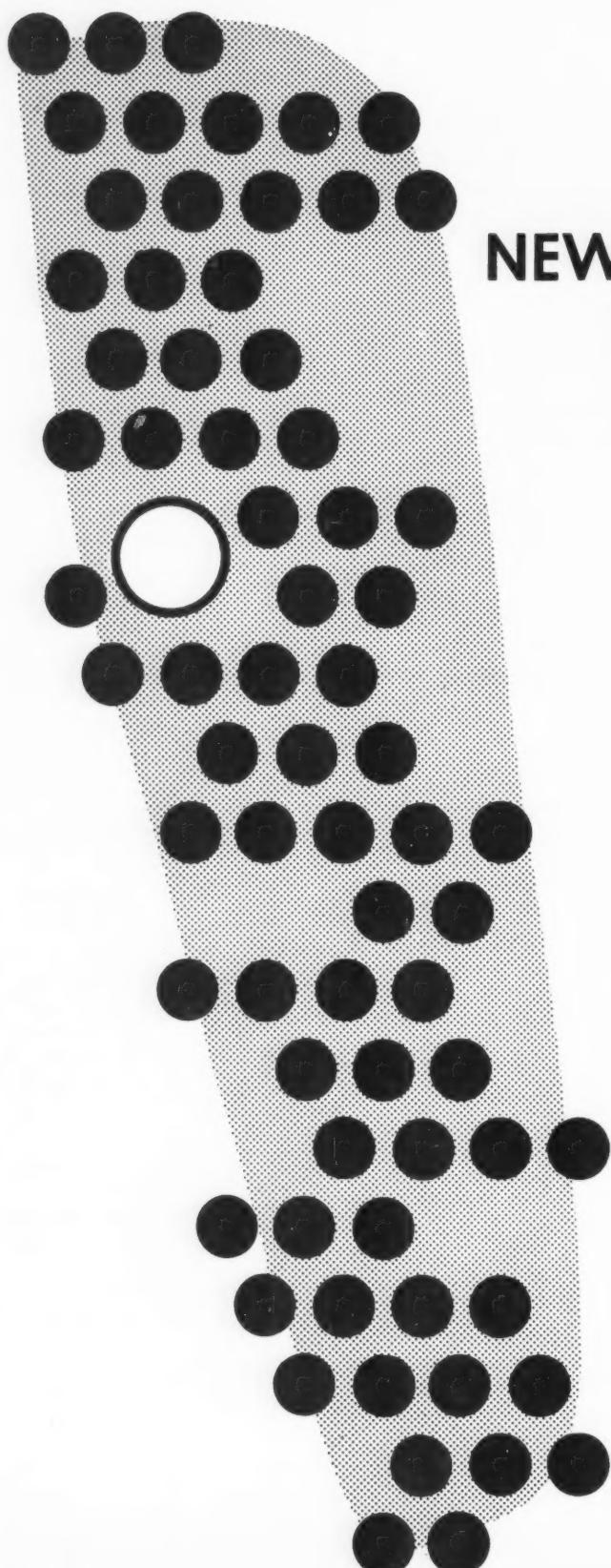
Yet, I believe that, in one important sense, our educational leaders have failed. They have not, clearly and resolutely, put first things first. It is not enough that peripheral efforts be made to lighten the load of the classroom teacher. What is needed, I think, is something like this:

1. Careful research should be undertaken to suggest some dependable answers to questions having to do with adequate class preparation time and optimum class sizes (presumably different for different subjects, activities, physical environments, etc.). At the present time, conflicting claims are particularly ripe in this area.

2. The results of such research should be studied and modified by local school systems in the light of their own special circumstances, such as the abilities of individual teachers.

3. Policies, clear enough to be understood by all concerned, should be instituted by each school system on the basis of such research, subsequent local study and the establishment of educational priorities.

This is, I realize, much more easily said than done. But, it is also, I submit, the kind of thing that needs to be done if classroom teachers are to have enough time for teaching.



by JOHN CURTIS GOWAN

NEW DIRECTIONS IN TEACHING THE GIFTED

CURRENT INTEREST in the education of gifted children has reached a new high after the apathy of the Thirties and Forties. This renaissance of interest following the pioneering work of the Twenties has been due partly to an increased awareness of the waste of our reserves of trainable talent in the face of vastly increased technical demands. Educators and the public have therefore turned their attention to a re-examination of our system of public education, which has succeeded relatively well in its democratic ideal of education for all, but has been less successful in adapting its program to meet the needs of our most able youth.

As a result of the present demands, the current wave of interest in education for the gifted departs in important respects from that of the past. These differences are significant because they point up departures which may be expected to increase in size and magnitude, and thus provide clues as to the directions which future planning should take. Among the most significant of these trends are the following:

1. Current practices are powered by intense public interest and strong public demand. This is found not only in the professions, but is also echoed widely in industry and busi-

John Curtis Gowan is a professor in the Education Division of State College, Northridge, California.

ness, as well as in the scientific, military and other quasi-public services of government. A recent California study, for example, showed parents far more liberal in their attitudes towards education for the gifted than are the principals and supervisors in public schools. Indeed, the interest of governmental, military, scientific and industrial sources shows tendencies toward the somewhat hazardous attitude of replacing public training of gifted persons with private education financed by industry. Public education may well need to face this challenge before another decade.

2. Current practices are science-oriented. The tremendous demand for scientific personnel to man our ever-expanding industrial economy has doubled the need for scientific personnel, and shows no signs of abating. Industry cannot be expected to look on complacently while a bottleneck develops in its most vital commodity—talented personnel. Government, involved in a gigantic race to keep ahead in technical know-how, cannot pursue a hands-off policy while other countries turn out more scientists and engineers. Our survival as a nation as well as our expanding scientific economy depends largely upon scientists, and it is only natural for education to reflect this fact. The hazard here is the possibility of sacrificing creative effort and progress in the arts and humanities, which may ultimately be of even greater value to society than scientific development. While educators may regret the emphasis on the short-term end of security at the expense of the longer term view of education in areas of human relations as the best deterrent of war, the trend nevertheless seems a fact.

3. Current practices tend to define giftedness in more liberal terms than formerly. There is less tendency to regard the gifted child as unique or highly unusual, and words such as "genius" are giving way to more meaningful terms such as "rapid learner." Criteria of giftedness are being broadened to composite indices including evidences of achievement as well as tests. There has also been some tendency to lower the minimum admission requirements for

such programs, and to increase in consequence the number of pupils eligible for inclusion. While such a trend broadens the base of personnel, there is some danger that it may make educators more complacent regarding the needs of very highly gifted children.

4. Current practices stress socialization. The tendency is to emphasize the civic responsibilities of gifted persons, and to try to assimilate the gifted child as a social being. More attention is being given to the problems of isolation which young gifted children face because of the paucity of true intellectual peers, and to aid them in forming the habits of social interaction which peer group membership provides. We are beginning to recognize that the gifted child cannot identify socially with children in general until he has been accepted by and has identified with other children more like himself. All-around aspects of living, including civic leadership, family life education and cultural attitudes, are being stressed for older gifted children in addition to their specialization area.

5. Current practices involve guidance. The problems which gifted children face in growing up are being recognized, and more help is being provided, particularly on the elementary level. Several systems have found that the grouping of maladjusted gifted children seems to offer a group therapy benefit from which many of them may be later returned to their classrooms. Both the guidance of high school gifted (to be sure that they go to college), and the provision for scholarships for them, are important and growing aspects of the overall guidance picture. Finally, guidance in college is being increased, for it is being recognized that gifted students are often confused by a multitude of alternatives and need counseling as much as the ordinary student.

6. Current practices employ a combination of classroom procedures. Whereas in the past enrichment, acceleration and grouping were handled separately, there is now greater recognition that none of these alone is the answer, and that a combina-

tion is more useful. Several plans now in use illustrate this trend. In a number, gifted children in one grade are put together in one section which is then filled with average students. Also, a reduction of the range of intelligence within a class from five to two standard deviations helps provide some approach to homogeneous grouping while preserving the advantages claimed for the heterogeneous system.

7. Finally, current practices involve research. We know a great deal more about gifted children than we did 30 years ago. Research, however, has moved away from needs and characteristics toward action research in actual classroom situations, in which teachers themselves take the lead in instituting enrichment or grouping programs. Smaller classes, better trained teachers, a more permissive and democratic atmosphere in the classroom, and greater reliance on the student's own responsibility characterize many current practices. These procedures, however, are obviously general good teaching practices for all students.

In a day when the shortage of teachers grows worse and classrooms become more crowded, special attention to gifted children is often more difficult to provide. Under such circumstances the education of gifted children may sometimes become a "paper program," with much talk but little implementation; or it may be found only in the upper-income districts of urban or suburban areas. Neither of these alternatives faces the realistic test of equal opportunity for the uncommon man in our midst.

Private education, especially in the independent day schools of the northeast, has shown without much fanfare what can be done with smaller classes, well trained instructors, and a judicious combination of a reasonable amount of ability grouping, enrichment and acceleration. Public education, which must continue to be the major approach for most Americans, needs to solve the problem of education for the gifted at this time in order to preserve its responsibility to the uncommon man, and its privilege of educating him under its aegis.



Brookline's headmaster in a planning session with the 4 housemasters who are chosen from the faculty for 1-year terms.

HOUSE PLAN in a high school

by ERNEST R. CAVERLY

ANY PLAN which does not produce desirable results should be scrapped, the sooner the better. Conversely, a plan which has worked well for 25 years, and is still hailed with enthusiasm by those who operate it, must be good. This can be said without bragging for the House Plan in Brookline, Massachusetts High School.

I became headmaster of that school in 1930 and superintendent of schools a year later. The membership was 1,600, in a 4-year high school, and it was growing, not phenomenally but fast enough to impress upon the administrators that they were responsible for a large school. Today the school has 2,200 students.

The idea of a high school of 1,600 or more with one administrative head (we call him headmaster) and one submaster was not consistent with the policy of individual attention to which we subscribed. The headmaster of such a school could not even recognize so many students, much

less know them. His assistant tended to become a worker in routine and in discipline. The arrangement was not good.

As I thought of the problem, I considered the House Plan at Harvard College and felt that it might be possible to adapt such a plan to a public high school. So I proposed that we reorganize our school into four administrative units, called houses, each under the leadership of a housemaster. These housemasters bore the same relation to the headmaster that vice-presidents of business corporations bear to their presidents. Each housemaster had an assistant of the opposite sex, who had only slight relief from class teaching and from whom correspondingly little was expected.

There was a housemaster for the entering class and one for each of the other classes, but these housemasters were by no means merely class advisers. They had more the status of a principal of a school of 400. They visited their prospective students in their elementary schools during their final months in the 8th

grade. They came to know them, their parents and their teachers. They studied their records, both teachers' marks and objective test results, and became aware of their personalities and ambitions. In short, they created a useful liaison between the elementary school and the high school. When the pupil entered the high school (we referred to him as a student then!), he was no stranger, for he knew the housemaster. The headmaster with his top leadership function was of the utmost importance to the newcomers, but it was the housemaster who made the closest personal contacts.

Plan individual programs

By the opening day of school the housemaster had prepared for each of his students an individually designed program of classes. We abandoned years ago the pre-fabricated curriculum and substituted one that was custom-made. We have found that this results not in easy programs but in reasonable ones.

Each house had a section of the school plant assigned to it, and all

Mr. Caverly is superintendent of schools, Brookline, Massachusetts.



Students from one of the houses as they meet to plan their house activities.

Brookline, Massachusetts reports 25 years of success with this Harvard-inspired organization that permits an intimate administration of a large (now 2200 students) high school.

the homerooms were in that section. Each house had a name, a banner, a motto and a color scheme. The houses were named for men whose contributions to local history had been significant. Each house had a council and other student organizations. Each house had its own assemblies, and sometimes joined in assembly with another house. In short, each house had its individuality and its idiosyncrasies—yet each had an overruling loyalty to the school.

And so it is today—25 years later. It is surprising to note how few basic changes have taken place in our House Plan, particularly since we have had three headmasters during that time. And we have had many housemasters.

What in Brookline's House Plan explains its success?

First, I should say, is the fact that the housemasters, men and women, are chosen from the high school faculty. This has several advantages. It recognizes leadership potential, it encourages legitimate ambition for administrative work, and it gives an exciting, productive experience to those who have leadership talents. The housemasters are paid from \$900 to \$1,200 in addition to their salaries as teachers, and are, like all other administrators, obliged by the nature of their work to give an unlimited amount of time and thought to the discharge of their duties.

Second, housemasters are given

four annual appointments and do not succeed themselves in office. There are some who question the wisdom of this policy. Their principal argument is that, by not reappointing a housemaster at the conclusion of his tour of duty, the school stands to lose the value of the previous experience. The answers to this contention seem to be: (1) if a housemaster knows he is to serve only once, he will certainly give that once all the devotion and skill that he has; (2) if four individuals acquire permanent assignments, that door to administrative advancement is closed to all others, some of whom might prove to be better than the incumbents; and (3) when a housemaster returns to the classroom, he carries with him a new understanding and respect for school administration and administrators, and thereby narrows the gulf between these two groups. It is true that, in a few instances, housemasters have been appointed who had previously served in that capacity, but these appointees had acquired no conviction that they had an inherent right to a second appointment.

Housemasters also teach

A third characteristic of our House Plan has been that a housemaster teaches one or two classes. Thus, not being completely transferred from the classroom to the office, he retains an active association with his teaching specialty and finds

the return to the classroom easy and pleasant. During the past year or two the housemasters have devoted a fraction of their time to guidance rather than to teaching. It is not yet clear whether this is wise. We have a strong corps of specialists as guidance counselors; they are not attached to the housemaster's staff, but function on a schoolwide basis. It is obviously impossible to separate the housemaster's guidance and administrative functions, nor is it desirable.

A fourth characteristic of the Plan is that the direction of instruction is not the responsibility of the housemaster. This belongs to the directors in the various subject fields, who are concerned with the curriculum and teaching from the kindergarten through the high school.

A fifth characteristic is that each of our houses is a reasonably homogeneous group. We do not have students of different age levels or classes in the same group. Nor is any student "demoted" from one house to another because of subject failure. The members of a house, and of the homerooms within a house, stay together as far as possible throughout the four years. They are graduated, however, only when they have met all scholastic requirements.

I have been pleased to learn that several high schools are studying the House Plan or have adopted it recently. Certainly it is a workable solution to the problem of bigness in a high school.

THE THREE C's OF



SCHOOL PLANNING

by W. W. CAUDILL

I KNOW it's no consolation, but there are many states in the Union that are in an educational mess, plant-wise. According to one national magazine, some states are still building "palaces." You know, the same people who are complaining about the "palaces" were crying only a few years ago that we were building "chicken coops." Some people you can never please. And trying to please everybody pleases no one. It only gets us into more trouble. And a recent issue of *Fortune* says we've got enough trouble without getting any more. It says education should be more efficient and more productive, if compared to the manufacturing of automobiles. I'm not smart enough to say whether you can compare the manufacturing process of cars with the educating process of children, and if you can I wouldn't know which has been the most efficient these last few years. But this I do know: American women have been a lot more productive and creative than American automobile makers.

No matter which direction we turn the educators and their downtrodden architects are shot at with such bullets as "frills," "palaces," "soft curriculum," "padded buildings," "plush," "educationists control," "monuments," "architect dictators." The architects themselves are doing something about this appalling situation. The AIA is instigating "Be-Kind-To-Your-Architect-Week." And if that doesn't work we are going to give away green stamps.

But the truth is these so-called

enemies of education are not really our enemies. Some are brilliant, sincere people who honestly believe that what they are doing will help give us better schools for our children. If that's their belief, then they are our friends. Many points of observation help to give truth to the problem-solving approach. I am sure the "educationalists" will welcome other points of view, even from the "liberal-artists."

My three "C's"

Although there is no reason why it should, this brings me to my topic—"The 3 C's of School Planning—Communication, Cooperation, Co-ordination." It's a good subject. Take the first "C"—Communication. I got a letter not too long ago from a reputable architect who said that in his state "architects are faced with designing elementary classrooms which are 960 square feet, no less, no more." I wanted to find out more about this most ridiculous requirement so I wrote someone in the Department of Education who said, "A grievous error. There is no such regulation." It looks to me like it's just a case of poor communication. Or is it?

The next "C" denotes Co-ordination—a very important ingredient of school planning. I am an architect because I've got a little card to prove I'm one—in Texas, that is—but I can't plan a successful school by myself. Enough said?

Now to the third "C," Cooperation—cooperative ventures. Architects and administrators need each other!

Now there is a fourth "C"—a big one. Big is simply short for Big Confusion. We are either so wrapped up

in our own importance or so entwined by the seemly conflicting ideologies of our current educational and architectural gods that we can't take a step forward without stepping on our own tails. In a lot of our professional lives Big Confusion prevails. The educators are harassed by the Arthur Bestors, the Mortimer Smiths, and the Taxpayers Leagues who want to tell them how to run their business. Confusion fills the air. Confusion sets in also when some people try to make John Dewey look like a villain. It's hard for the educators to keep from getting confused when they continue to operate in a muddled environment. And I might add that the educators are not helped much when they have to deal with the hardheaded architect who likes to play educator.

The architects are hounded, too, particularly by the AIAA. That's the American Institute of Amateur Architects. Apparently the AIAA through its bylaws must have a member on every School Board. And I hate to say this but a few superintendents not only carry an AASA card but an AIAA card as well. And I might add a great number of state officials have life memberships in this great fraternity of Amateur Architects.

Yes, confusion is with us all if our job is planning schools. But how can we operate in this state of confusion? I submit these recommendations:

1. Use the 3 C's of planning to minimize Big C.

2. Hold your nose so you can't smell the intellectual garbage, because it will always be with us. Recognize this fact and you will be less confused.

3. Don't worry about what the other guy is doing. You've got prob-

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C's of school planning . . .

lems of your own. Solve them. So what if the other guy is building palaces or chicken coops. Make your own mistakes. You'll be better off than if you try to copy his.

4. Remember that we build schools so that children, as individuals, can have opportunity for maximum growth and development. We don't build them for some steel company to pay good dividends, nor do we build them just to comply with some state or federal aid program or to make some pressed taxpayer happy or to relieve a board member. We build schools for children. When you get confused, think of children; then everything will fall in its proper place.

5. Now my fifth recommendation will take a little longer to explain and expand. All fifths take explanation. Here's the gist: Always hunt for and be smart enough to recognize the salient forces that will shape our future schools, so that your school plants will not be obsolete before you pay the blueprinting bill.

At hunting I'm pretty good. But I'm not so smart when it comes to recognition. Even as a kid when I had a bear by its tail it turned out to be a pig. I learned, because now I know what a pig is. Also I know that if I say what I'm going to say I'll have a bear by its tail. But here goes:

As I see it, one of the greatest forces that will shape our future schools is the attention that we give the individual pupil. We have known for years that children are not alike. At the turn of the century Edward L. Thorndike helped reveal that different individuals learn at different rates because each child has a different capacity for learning, together

with different motivations. Later Gesell in his studies substantiated this and pointed out that there are common behaviors among the various age groups, yet "the range of individual differences is as wide as humanity itself." Although it's been nearly half a century since Thorndike and others pleaded that the individual child deserves to have his chance, only now is this concept emerging in the curriculum. But we have a long way to go, according to Dr. Paul Mort of Columbia University. Recently I heard him tell a group of New York administrators that "most of what we say about individual differences is just lip service and we are not organized to take care of giving each child his chance." Now what is going to happen to the school plant when educators start practicing what they now preach on individual differences? If they do, I suspect that we shall be designing schools *without classrooms*. I wonder how many administrators have a really functional plan for teaching the individual and not just classes.

Certainly many state officials will be caught flat on their stack of restrictive regulations concerning classrooms, particularly the guys who had the urge to put lightning rods on every cow. But who ever heard of a school without classrooms? Well, let's go back to sleep on that one.

Second great force

Now for this second great force. It has to do with changes relating to environmental controls such as heating, cooling, lighting, ventilation and sound conditioning.

In the first place we are going to have to summerize our schools as well as winterize them. I was in a beautiful and functional (if there is a difference) new high school by Perkins and Will, in Schenectady, New York, one day not long ago. The dedication was the next day, although the school had been open during the summer months. It was planned for and was housing about 1,600 pupils during this fall term. However, during the summer 2,000 pupils attended. Reason? It was partly air conditioned. Our firm last spring completed a high school in

San Angelo, Texas, which is nearly totally air conditioned. During the summer months the enrollment doubled and next summer it is expected to double again.

That tail is wagging the dog, I shall admit. But the summer program is definitely expanding with better reasons:

1. Most children can't work and need something to do.

2. Educators need more time for teaching to do the job they want to do.

In connection with this last point I observed with a deal of interest during a recent trip to a school in West Germany that school was held on Saturdays and that only 5 weeks were given over to summer vacation. When the summer program is expanded the people who are responsible for putting hot boxes together and labeling them classrooms may feel a little heat themselves.

Now let me say something about lighting. The hottest thing in school lighting that will have design implications particularly to school plants is the report, but more specifically the interpretation of the report, of the findings of Dr. Richard Blackwell, who conducted an eight-year research program on vision at the University of Michigan. Dr. Blackwell's work is good, noncaptive research done by a highly competent and cooperative man. The problem is in the interpretation. The electrical industry, it seems, interprets Blackwell's research strictly in foot candle terms. Let me give it to you straight from Charles Gibson as he reported it to the National Council on Schoolhouse Construction in Seattle.

"The I.E.S. School Lighting Committee heard and read Blackwell's research and practically on the spot voted to recommend 70 foot candles as the minimum quantity of light for schoolroom task found on desk, chalkboard, or any other work surface. They chose to ignore as 'controversial' the findings on reflected glare done by the same research group. In other words they voted to raise present recommended foot candles from 30 to 70 without even a nod to the quality of lighting in-

stallation which Blackwell proved to be the very heart of visual efficiency problem." Even so, the *quality vs. foot candle* fight is still very much alive. Who will be the winner? I hope the children.

All this reminds me that only eight years ago in our own practice our electrical work was between 4 and 5 percent. Today it's between 9 and 10 percent.

Here's my prediction. If we can agree upon what is good and bad in school lighting and if we put as much stress on lighting in this next decade as we have in the past, it is going to take more than a casual glance to recognize a school building. Those big blue classroom eyes covered with dark glasses may be completely shut. A classroom needs no windows to see out if there is a good architect about who knows the skill of handling interior space.

Now one more thing about environmental controls. I'll make it short, in the form of questions. If European adults can eat outdoors under a sheet of canvas with a few resistant coils for heating on a cold day and still be comfortable, why can't some red-blooded American boys and girls do the same? Or play and work in conditioned outdoors?

Magic ratios?

Let me jump back to education. I would like to discuss another salient force that will shape our future schools. The answer to this question —how big should a class be?—will unquestionably grind up the regular egg crate-like arrangement of the school partitions. I haven't been able to trace this yet, but I have been told that you can find in the Hebrew torah a suggestion that there should be a teacher-pupil ratio of 1 to 25. Such writings are about 2,500 years old. Most educators still cling to this magic ratio.

This is particularly true at the elementary level. However, it seems rather strange to me that this idea is put into practice at the first grade and not at kindergarten. I should think the younger the children, the smaller the group they should be in.

The 1 to 25 to 35 ratio is taking quite a beating at the secondary

school level. In Newton, Massachusetts last year, Superintendent Harold Gores and his staff conducted English classes in the hundreds. He said, "I want all of my students to be exposed in a lifeblood situation to some of our 'great teachers,' even if it is only once a week."

Cy Sargent of Harvard questions the "one-teacher with 'X' student formula" and speaks of it as the education "sound barrier." Dr. Sargent suggests that "a group of adults might function as a team of teachers in order to relate their attention and activities to a wide range of flexible patterns to meet the needs of children." I personally like the idea because teachers are not alike and through the teacher team the higher level competencies can benefit a large group of students instead of a lucky few. Superintendent John H. Fischer of Baltimore, when I wrote him about grouping, replied that we need more straight thinking because "the people who say that small classes make no difference are often talking in terms of learning that can be promoted through simple drill. The people who stand up staunchly for small classes usually make fairly sweeping generalizations about pupil-teacher relationships that are difficult to measure in quantitative terms." Like Sargent, Fischer advocates the team concept to eliminate the "gigantic annual lottery which determines whether a given child will have a competent teacher or a well-meaning but inept amateur." If the team concept becomes popular, our school buildings will have to be quite different.

Remember, all of these suggestions for grouping are attempts to find a solution to the individual difference problem. And believe me, every time a creative educator opens his mouth the stock plan thinking architect cringes because the old stock plan simply won't work. That goes for the stock plan salesman, too.

Of course many attempts are now being made to take care of individual differences within the limitations of the old buildings by such means as the college prep course, the vocational course, and fine arts course offered in the same high school, or

the various "track systems." But these pose many dubious questions. Dr. Don Ross of New York State, who has been involved in psychological research for many years, answered my request for information this way: "Grouping or 'track systems' can sometimes narrow ranges, but cannot adequately meet the demands of individual differences." The most encouraging thing in education is the fact that we are getting closer to the day when every child can have his chance. And when that day does arrive there shall be a revolution in school architecture. Architect Bob Alexander agrees with me on this point and says, "radical changes will take place especially in secondary education when we establish the recognition of people as individuals." Anyone who thinks we have arrived architecturally is not thinking educationally.

Don't battle buzzards

In summarizing, let me remind you of Big C—Confusion with a Capital C. I shall give you one more letter quote, this time from my good friend Dr. Robert Koopman of Michigan. Apparently Big C is going to be as busy as ever. Koopman says, "I expect the welter of confusion to increase in the next two or three years. The professional, whether he be teacher or architect, needs to back his science and his art with integrity. He will still need to progress towards the good, the beautiful, and the true." To that I can only say Amen.

Now let me close this sermon with this reminder: confusion will always be with us if our job is planning schools, but here is how we can make progress in spite of Big C:

1. Minimize Big C by using your 3 other C's.
2. Don't get in a spitting contest with a buzzard. If you are alive, he'll leave you alone, eventually.
3. Don't copy some other school's mistakes. Solve your own problems. Take time to do it.
4. When you get confused, think of children; then everything will fall in its proper place.
5. Be alert to see and smart enough to recognize the salient forces that will shape our future schools.

SOUNDLY DEMOCRATIC as it is to find healthy differences of opinion within a legislative group, just how does a superintendent deal with a divided board of education? How can he fulfill his responsibilities as policy advisor when the board is split on policy issues? What alternatives are open to him in such situations?

My observation of a single school board in operation over an extended period, while working on a CPEA Community Study Project at the University of Oregon, revealed some interesting patterns of superintendent-school board relationships, and it particularly shed some light on this problem of working with a split board.

Coalitions form within policy-making groups when there are value differences among board members on the important policy issues. Board members who hold similar points of view or represent similar interest groups ally themselves in support of a proposed policy alternative. Support of one policy proposal places a board sub-group in opposition to competing propositions raised by other board members, or groups of board members.

Coalitions tend to continue from one policy action to another. However, not all board members align themselves with coalitions. When two or more such groups form within a policy-making group, the non-committed members become extremely important, assuming balance of power roles.

The following alternatives, depending on the policy issue, may therefore help the superintendent who must fulfill his policy advising responsibilities to a divided board:

1. The administrator can declare himself on an issue and support the coalition that most nearly reflects his own values.

In his role as policy adviser the administrator fills a strategic position in relation to affecting policy formulation.

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the SUPERINTENDENT

by LUVERN L. CUNNINGHAM

lution. If the superintendent clearly prefers one course of action over another he can declare himself openly on the issue. In so doing he may lend his support to one particular coalition point of view or proposed alternative for policy action. At the same time he risks the alienation of the other policy-making faction.

Such action is an expression of personal integrity and professional honesty. The administrator is willing to defend his position and stand upon his decision irrespective of the consequences. Repeated support for one policy coalition's point of view obviously will identify the administrator with that group. This can lead to the formation of an anti-administration faction on the board.

Although there apparently is risk in this alternative, the superintendent who "fights" for his cause is often admired even by board members who hold other points of view.

2. An administrator can attempt to avoid an open commitment to any coalition and feed to the board selected information which may enhance his personal value position.

This might be called playing it "cagey." The administrator adopts a wait-and-see attitude and carefully avoids tipping his hand. He clearly prefers one policy proposal over another but deliberately attempts to disguise his own position until, or unless, he is requested by the board to commit himself.

Actually an administrator may prefer that all policy decisions be board actions. Failing to identify

with any proposal allows him to provide information openly to both sides of a split board. It, of course, presupposes a willingness to implement any board decision that may grow out of deliberation.

Should a board rely heavily upon the superintendent for information, this places in the administrator's hands considerable control over policy formulation. Selection of this alternative does not suggest that an administrator is dishonest or unethical. Likely as not, there is a good bit of non-deliberate selectivity in the information most administrators present to boards.

3. An administrator can openly assume a "hands-off" position on controversial issues, providing information when and of the type requested by the board.

There are some policy questions which school boards must resolve about which an administrator may not wish to have his views known. If he does not want to participate in these deliberations, he can simply and openly declare that he wants no part of this particular policy issue.

In assuming this way of behaving he will not feed any information into the policy-making machinery unless he is requested to do so. Then he must provide only that information which has been specifically requested.

Some may question whether this course of action is actually possible for an administrator. They would argue that an administrator who openly declares himself out of a policy problem has in fact significantly affected the outcome through non-participation. This is true, but

and a DIVIDED BOARD

it does not rule out this choice as one way of behaving when confronted with a split policy-making group.

4. An administrator can seek to avoid bringing to the board problematic situations in which the stakes are high, for the administrator or the organization, when he thinks the issue may split the board.

The perceptive administrator knows which policy questions will introduce conflict. When the prospects for serious and disruptive disagreement are high, he can try to avoid bringing the policy matter to the board. This does not suggest that the problem will not be presented to the board—one of the board members might introduce the issue.

Behavior of this kind might be interpreted as an abrogation of professional responsibility. But it could conceivably be a serious attempt to avoid conflict for the good of the school system. There are many school problems which are relatively unimportant in terms of immediate resolution. These issues at the same time may be those which individuals or groups within the community have strong feelings about. Failure to bring such matters before the board might be interpreted as extraordinarily good judgement.

5. An administrator can try to postpone policy action on problematic issues until such time as he feels the board can arrive at a satisfactory solution, for him and the organization, in the absence of strife and turbulence.

This individual deliberately tries

to avoid open conflict, unpleasantness or possibly a bad press. Delay in introducing a policy problem may keep the school board intact.

As in alternative #4, the administrator will not always succeed in delaying consideration of an issue. He continually runs the risk of having the problem brought to the attention of the board by someone else. Such an occurrence would not only jeopardize the harmony of the board, but would place the administrator in an awkward position.

Probably all administrators exercise some discretion in bringing policy problems before boards. Timing is considered an important attribute of the successful administrator. Thoughtful timing appears to enhance administrator-supported policy proposals. Waiting to present an issue can avoid turbulence, but at the same time force acceptance of a less desirable policy alternative.

6. An administrator can wait until the pressure of time for acting precludes any serious discussion of the problem or the need for policy action.

This is a simple course of action. The superintendent avoids bringing a problem to the board until time has erased the need for decision. Probably most administrators have found it convenient to delay recommending a board action in relation to a personnel issue until the individual involved has resigned or accepted another position.

Waiting for time to resolve all problems would be unwise, for allowing undesirable situations to continue can be detrimental to the total

school system. The administrator will have to hazard a fight over the issue in the school board.

7. An administrator can expand the levels of information, the range of alternatives and conception of the problem in order to alter the coalition into an alignment of coalitions against the problem and not against one another.

The educational leader who chooses this course of action utilizes the most intelligent and professionally defensible approach. Opening up the question and providing full information raises the policy matter above the level of petty school board politics.

This alternative even suggests that the administrator reserves judgment about the policy proposition he will support until all of the evidence has been marshalled. The board subgroups, with complete information at their disposal, will be able to raise many policy proposals that were unknown to them when less data were available upon which to pass judgement.

Positing a policy-making setting in which the board has all of the facts, coalitions are permitted to agree upon mutually acceptable proposals which are in effect more than compromises.

Through open consideration of a range of alternatives, the policy makers are able to support entirely new policy statements. These propositions are the result of the integration of ideas and are, in fact, not compromises. In compromise, each participant sacrifices something to effect the compromise. But in integration, neither party loses, and each gains from the experience.

Certainly the test of educational statesmanship is the success an administrator has in working with a divided school board. The job of advising laymen about educational policy matters is a grave responsibility in all situations. If sound policies are to be formulated to govern the operation of local school systems, all of the participants in the process must be well informed.



... three articles on
creative new ways to
assess your high
school's program

ADAPTING CONANT'S ACADEMIC INVENTORY

by DONALD SAYLES
and EDWARD SHERLEY

IN THE SPRING of 1958 a distinguished visitor spent a day at Mont Pleasant High School in Schenectady, New York. The visitor had come to look at its comprehensive program, to examine some facets of its record, and to talk with members of the student body, faculty and administration. His name was James Bryant Conant.

Dr. Conant squeezed amazing amounts of information about our school out of every minute of the day which had been arranged for him according to a detailed schedule which he had submitted in advance. Mont Pleasant was one of the comprehensive high schools which Dr. Conant and his team were to visit in their survey of a hundred or so schools across the nation. It had been included for two main reasons. It pro-

vided its 1,400 students with a program which was comprehensive in nature in serving the heterogeneous population of an industrial city. Also, it had established a reputation as a good school.

Dr. Conant raised many questions. What was the socio-economic background of our students? How many went on to college? How many were taking mathematics and science? How did the number of girls taking these subjects stand up against the number of boys? How about the students who were not college bound? Did they have established goals? These are but a few of the many queries, but our concern in this article is related to one in particular: "Are the boys and girls who have the ability to study effectively and rewardingly advanced mathematics, foreign languages and tough courses in chemistry and physics enrolled in these courses? Are these academically talented students studying the subjects which will enable them to de-

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Conant's Academic Inventory ...

velop their talents and go on to derive the riches of personal fulfillment combined with service to society?"

In Mont Pleasant's case, this was certainly not a complicated question. Schenectady had been identifying its academically talented for some time. We knew who these youngsters were, had worked with some of them as our outstanding students and with others who were rather poor students. In response to Dr. Conant's specific question, however, we had no unified statistical study of these talented youngsters which could tell us to what extent they, as a group, had studied the subjects they were capable of studying or the degree of their scholastic achievements in these academic pursuits. It hit us as one of those situations in which you ask, "Now why didn't I think of that?" In concentrating upon individuals we had erred in not piecing together the information pertaining to them to form a total picture which could possibly tell us things that were not observable when considering parts of the whole.

Inventory spadework

Dr. Conant recommends the academic inventory as a device for examining the programs elected by the students during their four years of high school; he feels that it should be requested of the principal by the board of education for each graduating class. The name should be omitted but the form should include the sex of the pupil, ability level, courses taken during the four years and the grades obtained. It is suggested that if the distribution of academic ability in the school corresponds to the national norm the inventory form should be completed for each pupil in the top 15 percent of the graduating class.

For several years Schenectady had

been using an IQ of 115 as one of the determining factors in identifying students who should be considered as gifted. With conservation of time in mind we chose to continue using this figure as the ability indicator for our first and somewhat experimental inventory. The arbitrary figure was chosen with full understanding of the limitations of an intelligence test score as a sole basis for predicting academic aptitude. The students in our senior class who met the requirements for graduation finally numbered 361. The 47 students with an IQ of 115 or higher, as measured by the California Mental Maturity Intermediate 47 S which had been administered in the 9th grade, represented approximately 13 percent of our graduates.

At the time, a college student who was doing his graduate work in the field of guidance was spending some time each week as an intern under the wing of the coordinator of our guidance department. With this guidance coordinator as a standby source of counsel, the student examined the folders of the large senior class and procured the needed data; this was the research phase of the broad guidance experience we were attempting to provide for him. As the tedious task progressed, it became increasingly obvious that a total result, depicting the sex and ability of 47 students, the names of approximately 1,000 subjects taken by these 47 students over a 4-year period and the final mark for each of these subjects, would be an obscure picture at best for those of us on the immediate scene. The difficulties to be encountered as board members and lay committees sought to elicit valid understandings from such an accumulation of data would, it seemed to us, virtually negate the effort extended in preparing the report. Consultation

with the mathematics department resulted in a graph study.

Graph studies

The first graph was drawn up, for inventory purposes, on the 47 students, the 20 or so subjects chosen by each and the achievement in these studies. The 47 top students appeared on the graph in descending order according to IQ. The rank in class for each student had been determined in September and February of the senior year according to our annual operating procedure. Rank is computed by assigning a numerical equivalent to the final mark for each subject taken in the four year period and then deriving an average. The student with the highest average computed in this fashion ranks number one in the class and ranks are assigned from that point on down.

The program chosen by each student was represented on the graph; depicted were the number of units in subjects taken in the area of the five solids, which in the study of the American high school are considered to be English, history, modern language, mathematics and science. Also charted were the number of units in subjects required by the course of study taken by a student over and above those required subjects already covered by the solid category. In this category are a number of two-unit subjects that are difficult, laboratory-type, technical science subjects. They were not included as sciences in the solids because of their specialized nature but could very well be considered as solids. Lastly, the graph represented the number of units in subjects taken in electives that are not already represented as solids or required subjects. Examples would be choir, art, speech and the like.

Study results

Here we will raise some questions, the answers to which should be part of the working knowledge of high school faculties seeking to improve their curricular offerings and the educational use students are making of these offerings. Questions will be followed by the answers which our graph provides with reference to Mont Pleasant High School.

Are the academically talented stu-

students taking the subjects from which they can derive the most educational benefits?

The committee surveying the American high school strongly recommends that the program for the academically talented include 18 units in the area of the academics or solids. Our graph tells us that among the 47 students we indicated were academically talented we find the following breakdown of units in the academic subjects: seven of the academically talented students were taking 18-20 units in the solid subjects; 10 were taking 16-17; 14 were carrying 14-15; nine had 12-13, and seven students had under 12 units.

Since four units in English, three in citizenship education and one each in science and mathematics are required of all, everything over nine units in this breakdown consists of elected solids. These electives consist primarily of science, math and modern languages with the possibility of only one additional unit each in English and social studies.

The talented in this class, for the most part, fell short of taking the number of subjects in the solids proposed as optimum. However, our findings show that these students were, with few exceptions, in the courses of study which could be challenging to them and make a significant contribution to their development and total education. A quick survey of our study further shows the following: 40 students of our group were either in the college preparatory category, or were specializing in technical electrical or technical mechanical; five students were in the business education course and two were classified as general.

It is interesting to note that although 16 units represents the minimum requirement for graduation, the units earned in subjects taken by the ability students range from a low of 17 to a high of 26. The breakdown for total subjects in the individual programs is as follows: seven students were carrying 25-26 units; one had 23-24 units; 11 students had 21-22; another 14 carried 19-20, and the last 14 students of the group carried 17-18.

Forty percent of the students under

discussion were able to handle courses of study totaling 21 units or more. The seven carrying the heaviest loads did well enough to rank above the 85 percentile in the class. These two facts derived from our study would tend to verify the belief held by many that a capable student, under favorable circumstances, can carry a heavy scholastic responsibility and do a good job of it.

Are the academically talented achieving in the courses taken in accordance with the measure of their ability to achieve?

For the purposes of this study, we concluded that a student who is in the top 13 percent of his graduating group in terms of ability should, if he is achieving to a degree reasonably commensurate with this ability, rank in the top 20 percent of his class. If this premise is acceptable, it means that a student who has achieved to a degree that causes him to rank below 72 in the class is underachieving. A check through our findings, with this as the measure, shows that 21 students or nearly 45 percent of those in the talented group are underachievers. They are not making use of the talent with which they are so fortunate to be gifted. Unquestionably this should be, and is, cause for grave concern.

Some further information about those underachievers can be readily obtained from our graph. When we make a thorough study of the problem, which will probably take us back to the individual, we can make a start, at least, by determining such information as the ratio of boys to girls, the number that went on to college and the kinds of courses and loads that were carried. In looking at the total picture we must not make our original mistake in reverse and forget about the individual, for as expressed in the 1959 Yearbook of the Association for Supervision and Curriculum Development: "The humanness of each child is the heart of the teaching problem and at the same time the key to its solution."

Do the 4-year programs selected by the students represent a reasonable balance in terms of general education?

If we think of general education

as contrasted to specialized education, it is likely that we are correct in proposing that solids and free electives in combination make up the program of general education for the individuals under study. Specialized education is indicated by the students in the business education and technical courses. No specific ratio will be suggested here as to what constitutes the correct balance between specialized and general education in high school, but impressions can be gained from our findings regarding the existing balance. Our faculty can judge whether the balance is a healthy one or whether adjustments should be made.

Have the academically talented students been accepted at college or some other institution of higher formal education?

Since our survey was a year ago, we have been able to see how many of our ability students are continuing their education. We find that of the original 47 talented students, 23 (49 percent) are now attending college, four (8 percent) are participating in formal education on less than a four-year basis, and 20 (43 percent) are not continuing their education at this time. A closer look at these figures, however, shows that 25 of the 47 talented students had taken the college preparatory course, and of these, only four did not go on to college.

Dr. Conant's group then concluded that designation of rank in class is detrimental. The contention is that bright pupils often elect easy courses in order to insure high grades and high class standing. Is this true at Mont Pleasant High School?

This question, combined with the observation of the fact that the number one ranking student in the class, along with several others in the "top ten," does not show in our graph because of not meeting the 115 iq cutting line, caused us to construct another chart which differs from the iq graph in that the 47 students represented are those who ranked 1 to 47 in the class. Thirty of the students who were in the first graph are replaced by other students. By the definition already arrived at, we may consider all of this group to be

Conant's Academic Inventory . . .

achievers for, in terms of academic achievement, they fall in the top 13 percent of the class. Much of the information determined about the talented from the first graph can be obtained from the second study for the achievers. At this time we will confine ourselves to the question at hand. Did the "top ten," who make up the group singled out for scholastic achievement by being assigned honor seats on the stage during the commencement ceremony, take the easy road in order to attain this honor?

Our study tells us that 9 of the 11 students who ranked in the "top ten" were taking courses in preparation for college. With regard to the remaining students, we would not label our business education course as an easy course. Five of these high-ranking students had taken 16 or more units in the solids. Four of the others were technicals who were taking difficult science type subjects which could be considered as solids and would bring their total in the solids above 16. Interestingly enough the number one achiever took more subjects than any other student in the class and took more solids than any other technical student. We believe that in this class the motivation of top honors in rank has had a positive rather than a negative value.

Additional support for the thesis that achievers do not expend their talents avoiding work is demonstrated by the following information gleaned from both our studies: Five talented students and nine achievers had from 24 to 27½ units in their programs. Nineteen talented and 26 achievers carried from 20 to 23½ units, and 23 talented and 12 achievers had from 16 to 19½ units.

What Lies Ahead

The problems to be solved in edu-

cation seem to reproduce by fission, and solutions, even of the partial variety, seem to be few and far between. Nevertheless, a first step in the solution of a problem almost always must involve a process of identification and isolation. The academic inventory can be a valuable instrument in the hands of a faculty which is determined to do something about the problems the inventory brings into focus. In the foregoing sections, we have found out what kinds of information can be gleaned from an inventory along with the advantages of presenting the data graphically. The inventory has also left some big questions, most of which were previously suspected but never pinpointed, such as:

1. What can we do to encourage some of the academically talented to increase the number of subjects they take in the academics?

2. Is there an indication here that there should be an 8-period day for those students who can profit from it?

3. In order to meet the demands upon time made by the course of study suggested for the academically talented, should we allow laboratory periods to be taken from physical education or some of the non-academic electives?

4. What do we feel should be a sound balance between subjects in the area of general education and those in specialized education?

5. Was there something that we could have done for the achievers who prepared for college and did not go?

6. In future inventories can we improve upon our designation of the talented so that a single IQ test does not serve as the determining factor?

The problem which looms over all the others that have come to light in this discussions is that of the underachievers. Have underachievers made up 45 percent of the talented group in previous classes? How about those who are presently in our school? Is there some pattern we can establish regarding the underachievers in our school? What are their characteristics? What seems to be the contributing causes in their personal makeup, in their home life, in their school life?

What are these factors in the achievers and how do they contrast with the underachievers? Is there some way in which the curriculum of our school or we as school people are failing these youngsters and contributing to the problem? How much sorely needed talent is being lost across the nation as a result of underachievers in other schools? It would seem that these are questions for which the faculty at our school must seek answers. Our faculty advisory council has already incorporated the information obtained from the inventory as part of the reservoir of knowledge about our students essential to efforts for curriculum improvement.

In a recent conference on the Identification and Education of the Academically Talented Student in the American Secondary School, recorder A. Harry Passow presents the thinking of the group on guiding the academically talented when he writes:

In a society where the need for trained manpower is multiplying constantly and loss of talent must be viewed with alarm, efforts to increase the talent reservoir and decrease waste through oversight must be redoubled. This aspect of talent development is as crucial and important as improving the quality of educational experiences of those students who are achieving and who react positively to school programs.

The phrase pertaining to the need for improving the quality of educational experiences brings to mind a precaution. Providing for the academically talented as well as for all of the other students we find in our schools must consist of more than getting the right people into the right subjects for the right length of time. This is a first step and the academic inventory can help us make it successful. Underlying the total educational opportunity for our youngsters, however, is the nature and quality of the experiences afforded these students in the subject areas and in all other facets of their school life. The study, evaluation and effort to improve the nature and quality of these experiences must be an intrinsic part of our professional way of life.

QUALITY CONTROL YOUR STUDENT ACTIVITIES

by HUGH M. SHAFER

FOllowing the orbiting of the first man-made missile, many suggestions were offered for revising the job of secondary schools. Unfortunately, many of these early proposals were born of hysteria. An outstanding west coast newspaper supported a proposal for doing away with all extra-class activities, commonly referred to as the student activity program in secondary schools. One of the arguments put forth was that such activities rob students of valuable time—time which should be put to better use studying “fundamental subjects.” Certainly these disciplines are of extreme importance in modern life.

One observes, however, that the quality of education in a democratically oriented society should be viewed broadly, not limited to subject matter in as few as two or three disciplines. Instead, education should relate to all the experiences and activities by which, and through which, young people learn in their growth from childhood to maturity. This means that extra-class activities constitute a significant part of the total educational program of schools in this country. As such, the activity program offerings of the schools should be checked for *quality* along with the regular curricular offerings.

In this connection it is significant to note that in Minnesota, a *Guide for the Improvement of Student Activity*

Programs in Minnesota Schools was released and distributed by the State Department of Education in 1957. At about the same time in Texas a “committee of ten” launched a state-wide study which, among other things, attempted to catalogue all pupil extra-class activities in the schools. Moreover, the study also dealt with how the schools go about regulating these activities. In California, state regulations govern the charging of fees for pupil membership and participation in extra-class activities sponsored by the schools.

Believing that quality in education should be judged in terms of need, I conducted a brief study of practices in individual school systems last year. Secondary school principals in 210 fairly typical school communities were asked about their activity programs. The resulting data were tabulated so that we could observe any appreciable differences among practices in the four regions of the United States: the West, South, Northcentral and Northeast. Tabulated data also made it possible to check resulting differences for extra-large, large, medium and small communities. A differentiation was also provided for junior high schools.

Are Activities Needed?

With respect to the need for extracurricular activities, 80 percent of the 210 secondary school principals said that such activities are more important in a democratic society than in a totalitarian state. An even larger percent from schools in small communities were of the same opin-

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ion. If this point of view is educationally sound, one senses a danger in discarding, or substantially de-emphasizing, extra-curricular activities in schools of the United States in order to copy or compete with Russian educational practices involving great emphasis on content subjects.

Approximately one-third of the principals said that their student ac-

tivity programs had been re-emphasized since Sputnik. A greater number, or 38 percent from extra-large and large communities reported similarly. However, in the medium-size communities only 20 percent indicated that their extra-curricular programs had been re-emphasized over the same period.

In contrast to this, 16 percent re-

ported that their activity programs had been de-emphasized. A proportionately larger number or 21 percent of the junior-high school activity programs apparently had been de-emphasized. Could it be that so much additional content has been allocated from senior to junior high schools in recent months that student activities are being forced out of the schedule? Only 11 percent of the principals from large communities indicated a de-emphasis.

In the short space of two years, 46 percent of the secondary schools represented have changed the emphasis formerly given to extra-class activities. This indicates much concern on the part of secondary school workers for this phase of the total program.

Are Existing Extra-Class Programs Effective?

For purposes of getting an appraisal of the relative effectiveness of present curricular and extra-curricular offerings, principals were asked to rate both programs on identical scales. The scales were designed to identify five rating points each—inferior, below-average, average, above-average, and superior.

Judgments logged at the upper end of the scale are considered first. In terms of effectiveness, 31 percent of the principals rated their curriculum offerings superior, while only 21 percent of them so rated their extra-curricular programs. Thirty-three percent gave their curriculum offerings above-average, but only 21 percent gave the same rating to their student activity programs. In small communities and in junior high schools fewer activity programs were rated superior. The ratio was 13 percent and 10 percent respectively as against 21 percent so rated throughout the country as a whole. Ratings at these two upper points on the scale seem to indicate considerable room for improvement in existing student activity programs, despite the change which is reported to have taken place in this regard over the past two and a half years.

At the other end of the scale, not one out of the 210 principals rated



Many administrators favored students paying for extra-class activities.

his curricular program inferior, but 3 percent of the group said their extra-curricular offerings were inferior. None of the principals from the western or northcentral regions even judged their curriculum programs as being below-average in effectiveness. For the country as a whole, curriculum effectiveness was rated below average by only 2 percent, in slight contrast to 3 percent of the schools in which principals gave their extra-curricular programs a rating of below-average. Other regional differences are noted, however, with 9 percent of the activity programs in the northeast region being judged below-average in effectiveness.

If the foregoing ratings are valid, one can conclude that the educational programs, both curricular and extra-curricular, are slightly more effective in the western and north-central regions than those currently operating in the southern and northeastern regions.

If the citizenry of the United States is to be satisfied with average effectiveness, some comfort can be drawn from the finding that 51 percent of the principals rated their extra-curricular programs average. This is a logical finding when applying statistical techniques to unselected cases, but many of the same principals rated their curriculum offerings higher than average, (curricular 64%, extra-curricular, 42%) thereby making the former significant. Here again one recognizes a considerable margin of difference between the rated effectiveness of the two aspects of the total secondary school program, a difference which should challenge administrators to increase substantially their efforts towards improving activity programs for pupils. The issue is not one of pitting one phase of the program against another, but rather one of working towards the improvement of both curriculum and student activities programs.

How Can Out-of-Class Activities Be Improved?

What suggestions can be drawn from the data for improving the extra-curricular activities? An impres-

sive majority or 81 percent of the principals felt that the same methods should be employed in developing good extra-curricular programs that are used in developing the regular curricular materials and programs. Slightly more than three-fourths favored using carefully selected teacher-aides, or other non-certified personnel as sponsors or co-sponsors in providing appropriate extra-curricular activities for pupils. In the junior high schools and small communities, the principals were even more willing to utilize such helpers as indicated by 84 percent. Principals in extra-large communities were less apt to look in this direction for assistance, yet over 71 percent favored the idea.

An even greater number of the administrators favored schools encouraging other agencies and institutions of society towards helping provide appropriate extra-curricular activities for today's youth. For the country as a whole, 88 percent of the principals favored sharing these responsibilities with outside groups. On this point, the junior-high school representatives were again most enthusiastic, as indicated by 100 percent who said such community groups should be encouraged to assist with out-of-class services to youth. If the schools can not be "everything to every youth in the community" and do an effective job, is it not appropriate to encourage other groups and agencies of the community to organize for sharing in this important work?

Who Should Pay the Cost of Activities?

Slightly over one-half of the administrators favor pupils assuming a minor part of the cost of extra-class activities sponsored by the school. Thirty percent thought such activities should be totally free. Interlinear comments reflected a belief that since our public schools are tax supported, all educational services should be free. Only 13 percent favored students bearing the major cost of such activities. No significant differences were noted among the regions or population groups on this point.

How Should We Relate the Bright Pupil to the Program?

Secondary principals apparently want activities for bright pupils, so that they will have a balanced program of growth and development. Over one-half said bright pupils need activities more than do other pupils. This feeling was expressed by 66 percent of those from schools in the southern region. The remaining responses were fairly equally divided between bright pupils needing fewer, or needing the same number of activities, as others. Activities for all pupils should be selected with equal care in the opinion of 70 percent of the administrators. Twenty-nine percent thought greater care should be taken in helping bright pupils select activities than is required for others.

If bright pupils carry a full academic schedule, as proposed by James Bryant Conant, will they miss the values which participation in student activities provide? More than three-fourths of the principals felt they would not. Apparently it has been observed that students of this ability will find time to participate in activities while carrying five major subjects. If this is true, principals need to give very careful consideration to scheduling activities. Less than one-fifth felt bright pupils would not participate in activities if they were carrying a "full academic program." No regional differences of significance were noted in this connection.

What Should We Do?

Our challenge, therefore, seems to be to continue working diligently towards improving the quality of our educational programs. This means the total program which must be based on the needs of youth and the needs and demands of society. Some student activities have not been thus founded. Let us apply the professional "know-how" we have used in curriculum development to improve student activities. The foregoing evidence indicates that we are behind in this important area of service to youth.

HOW TO EVALUATE YOUR SCHOOL

by ELSIE FRANCES GIBBS

HOW MAY ADMINISTRATORS know whether the work of their schools is superior, mediocre, or inferior? How may they know how their staff feels about the total school program? How may they know what the students and community consider outstanding and what only average? Secondary administrators in California believe they have a plan by which valid answers are obtainable.

For many years the University of California has reported to principals the grades made by their high school graduates, but the modern high school is the school of the people, serving many who do not go on to college. How effective is it in its work for this other large segment of its population?

Secondary school administrators in California through their own organization determined ten years ago to find first-hand answers to these questions. As a result, a committee was appointed to develop criteria by which local schools could determine for themselves their own effectiveness and their own needs. Obviously professional help would be needed. The committee established the plan for this by calling on their own members and being aided by the teacher training universities and colleges of the state and the California Department of Education.

First, criteria were established as

to their real purpose. These include:

- To upgrade the total school program.
- To provide a basis from which to restate goals in the light of the needs and financial ability of the area.
- To identify problems that need attention.
- To indicate strengths that may be used as a basis for continued growth.
- To start a practical program of in-service education for the entire school staff.

Basically, the principles of self-evaluation acknowledge that the local community decides what kind of a school best meets local needs, and that the final objectives of any school program are those set by the local school board. It follows, then, that the most effective evaluation of a local school is the one in which those involved in the local school program lead out, since they have best knowledge of local needs and locally established educational aims.

The program provides broad, educationally sound criteria, accepted by the State Department of Education and California Association of Secondary School Administrators and to be used by the local school committees in evaluating their school program. A second important value is in having a group of educators from outside the local school, representing several facets of education, review the school's report objectively

and discuss it frankly with the local school staff not as inspectors but as professional co-workers.

The CASSA Appraisal-Accreditation Program provides a rare opportunity for involving school board, administrative staff, instructional staff, classified staff, and students in a cooperative professional experience that is unique in its possibilities. It is the only program presently available that involves these people in a coordinated effort, with the assistance of professional help and consultation, to improve the total school program. It provides an effective basis for the establishment of a meaningful program of in-service education for the professional staff.

Also, one of the exceptional features is involvement of the classified staff in a truly professional program. The school administration and the school board have an opportunity via participation in the evaluation process to really find out what is happening in the school and how well the school program is fulfilling the school's objectives.

CASSA's program is now a going concern. The original committee has grown in number and shifted in membership over ten years but dedication to duty and enthusiasm have characterized its work. At no time has there been greater optimism concerning this project than at the present time. The current interest and participation indicate a widespread desire to maintain and improve the quality of the educational

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program in California secondary schools. Within a relatively short time, most of the secondary schools in California will have taken part, voluntarily, in the present plan of evaluation and accreditation.

The school making such a study follows planned procedure which recognizes adequate timing as essential to the success of the plan. Nothing is done hastily nor without thoughtful organization. First the principal requests approval of his superintendent, who obtains official ratification of the Board of Education and a budgetary allotment. This allotment is the cost to the district for the services it receives from the California Association of Secondary School Administrators and its visiting committee. Members of the visiting committee are educators who receive expenses but no salary; they donate their time.

The Association appoints a visiting committee chairman to assist in the conducting of the school's program; he helps all concerned to organize for the experience. This includes choosing a date, four to six months away, for the visitation of the school by the visiting committee.

The local school committees gather data concerning their school, following the pattern set by the Accreditation Committee. If necessary, the chairman of the visiting committee further helps and guides them in their study.

When the school committees have completed their work, their reports are duplicated and one copy is sent, at least two weeks prior to the time of the visitation of the school, to every member of the visiting committee. The committee members study these reports thoroughly before their visit to the school where for more than two days they meet with the school committees who made the reports, discuss problems, strengths and weaknesses of the school as seen through local eyes.

A written report is then prepared by the visiting committee and submitted to the school and to the Accreditation Commission. The Accreditation Commission studies the report, refers to school committee reports when necessary, and grants ac-

creditation to the applicant school for periods of time not to exceed five years. Copies of school reports are returned to the local school for use and study, and other copies are distributed to the State Department of Education and two copies to the CASSA office for filing and research.

This plan and organization of data for quick and valid interpretation was not easily nor hastily evolved. Before being printed in its present form, CASSA's appraisal form or instrument was subjected to nine revisions which were made as results of careful study and experimental use of the instrument in actual school situations. The procedures are designed to be subject to constant revision as the Accreditation Program matures further and circumstances indicate need of changes.

Three of the San Bernardino secondary schools went through the self-appraisal process in 1954 along with other volunteering California schools in order to help develop the instrument of self-appraisal and patterns of procedures. Now after five years these same schools and others in the district are seeking another "look-see" to determine progress made. Pacific High School, established only six years ago, participated in 1954 and again in 1958-59; the school staff feels they have solved many of the problems cited in 1954, and that its strengths are even greater and that its weak spots are now removed.

As the Accreditation Committee reviews the reports from the school supplemented by that of the visiting committee, it reviews the community, its types and unique needs and the school's place in this particular community. How adequately it is staffed, what its holding power is, how broad a program is available to meet the needs and interests of the students of this particular area, and how adequate is its school plant are all reviewed in light of professional standards of the state.

Although participation is voluntary the Accreditation Committee finds that almost every secondary school in the state has recently been evaluated or is on a waiting list for such a process.

The form which was developed for use by all schools has now been refined with development of separate instruments for junior and senior high schools and for large city high schools and small rural schools. Basic objectives and procedures remain the same in all of these. The criteria are: what kind of a school will best serve the youth of this particular community, and how can it be strengthened. That school administrators are finding the results satisfying may be noted from the following direct quotes from educators in schools recently completing the Evaluation Study:

"I have always believed that we had a fairly democratic arrangement in planning among staff members, and that they had a part in making decisions which affected them. However, since the evaluation study, I have observed members of both the certificated and classified staffs are more free with suggestions for improving our school and the school program. There seems to be more of a feeling that they have a stake in things. They feel much as any of us do when our opinions are solicited and considered."

Another says, "It made me much more aware of the problems of education in general. Teachers have given me this same reaction by statement and by the attitudes regarding their own work. It definitely helped improve the viewpoint of the teaching staff as a whole."

From another school, "We expect implementation to be slow but sure. Communication has greatly improved and as the visiting committee pointed out, this was one of our big failings. Personally I am convinced of the excellence of the experience for schools and am a strong supporter of the evaluative instrument."

A teacher reports, "It seemed to me as a faculty member that one of the most valuable things about the evaluation was the opportunity it created for the teachers to become better acquainted with one another's problems and goals and to discover that they were all operating on the same track, so to speak. Faculty morale improved, and this factor alone made the whole thing worthwhile."



NATIONAL HERITAGE PROGRAM

by JAMES MICHAEL LEE

BAY RIDGE, located in the southwest corner of Brooklyn, has long been noted as one of the most fiercely independent communities in the borough. When asked where he lives, a Bay-Ridge-ite rarely says "New York City" or "Brooklyn"—his response characteristically is "Bay Ridge." Bay Ridge is almost a separate community within the larger community of Brooklyn. It has its own newspapers, its own societies, its own civic associations. There is a tremendous unifying spirit in Bay Ridge which has made it a community unto itself.

Yet despite the great homogeneity of community feeling shared by Bay Ridge citizens, few parts of New York City have as heterogeneous a

population. The core of this area comprises what is one of the wealthiest sections of all Brooklyn, yet its fringe areas are dense with tenements. There are at least 15 different nationalities liberally represented. This fact presents at once resources and obstacles for effective school-community relations.

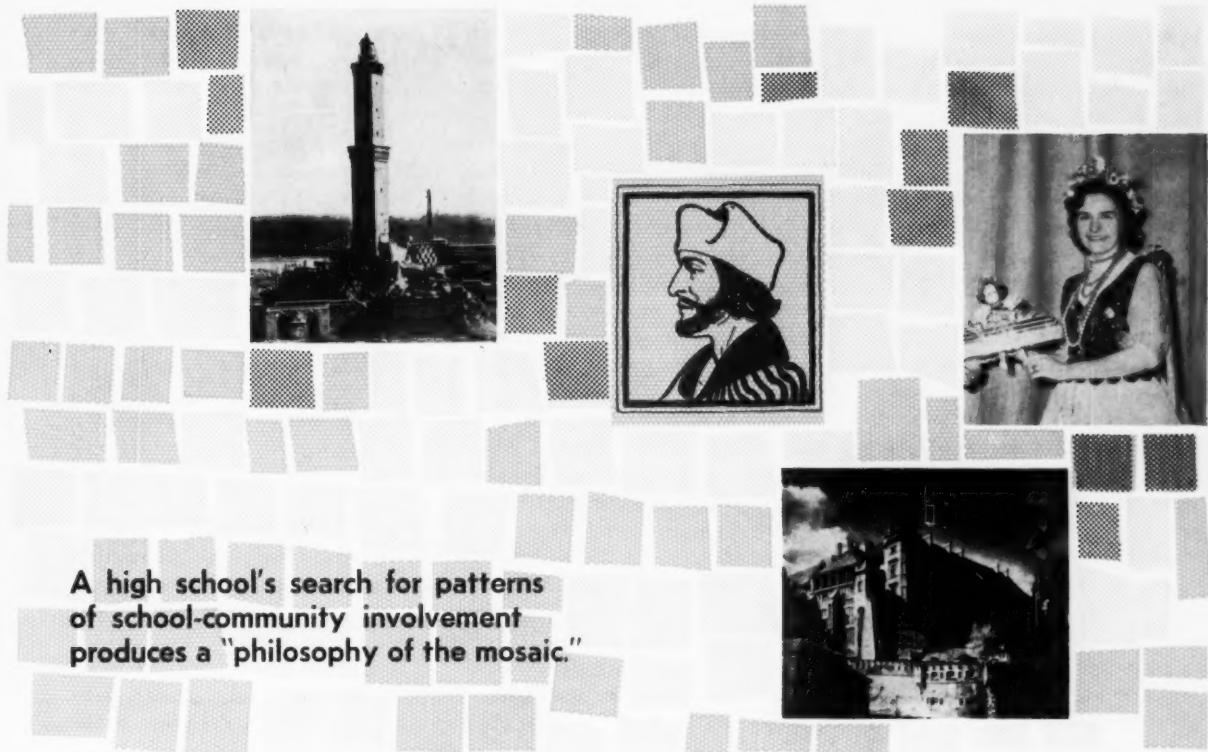
Almost squarely in the geographical center of Bay Ridge stands Bay Ridge High School. Through the untiring efforts of Elizabeth Fitzpatrick, its principal since 1938, this school is also the community center. From 7:30 in the morning till 10 o'clock in the evening, and sometimes later, the plant is in constant use. Multiple session classes ministering to the needs of nearly four thousand girls, evening classes for adults, community civic meetings, citizens advisory councils, the PTA, veterans' organizations, these and other community groups make Bay Ridge High

School the intellectual and social hub of Bay Ridge.

But Elizabeth Fitzpatrick is not satisfied; rather she is always looking for new and better ways to realize even more fully the rich potentialities of the school-community concept. Together with Charles E. O'Neill, her special administrative assistant in charge of school-community relations, she is ever seeking to involve the community in the life of the school, and vice-versa. The four organizational approaches identified by school-community experts—analysis, design, implementation and evaluation—have almost always formed the framework of her community involvement programs. Strange to say, however, the program which was perhaps the most fruitful of all, the Heritage Program, started without any prior structuring.

No one in Bay Ridge High School today really knows how the Heritage

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A high school's search for patterns of school-community involvement produces a "philosophy of the mosaic."

IN A BROOKLYN COMMUNITY

Program began. Some say it had its origin in a Columbus Day Rally, others believe it was suggested by a member of the advisory council while still others think it developed from an assembly program on brotherhood. But the consensus is that it arose spontaneously. No one person initiated it; rather it almost appears that everyone thought of the idea at the same time.

Actually, this sudden mushrooming of the heritage idea was far from strange; it was the most natural thing that could have happened in this particular situation. The entire climate of Bay Ridge High School almost demanded such a beginning, because creative self-expression of students, staff and community leaders on problems affecting Bay Ridge, their own community, is the way in which this school functions. The growth of this idea is certainly a high tribute to Elizabeth Fitzpatrick whose

exemplary approach to school-community involvement provided the wholesome soil in which such a concept could be born, nourished and brought to full flower.

From long experience with school-community endeavors she knew the vital importance of a planned approach and a sound organizational framework. She realized that no organization is of much value unless it is built around a purpose or goal. After conferences and discussions with the staff, students and community leaders in which she invited their suggestions and recommendations on what the underlying principle of the new program should be, she evolved what she terms the "philosophy of the mosaic." The citizens all felt that Bay Ridge, their community, is not a melting pot where all national groups lose their identity. If this were true, all the inherent richness found in these groups would be lost forever.

Instead, the community is a mosaic, a grouping of all the different nationalities and races to form an overall pattern which incorporates the best of every culture. As every piece of a mosaic is necessary for the complete beauty of the picture, so likewise the community would be incomplete if it failed to utilize the contributions of any one of the national groups. The melting pot reduced all the cultures to the least common denominator, while the mosaic idea sublimated each to produce a composite of the best.

Soon after this decision on the basic philosophy had been made, plans were formulated for the organization of a suitable school-community relationship built around this concept. No one knew what concrete form this relationship would take. The staff, students and advisory council cooperatively decided to explore the possibilities and report

back with their findings. Each group would use an appropriate technique to reach the various areas of the community. Since these school-community techniques were in each case as different as the groups employing the technique, it was felt that a representative and composite picture would develop out of which an organizational base could be made for implementing the findings.

The pupils began interviewing the parents of the various cultural groups represented in the student body, as well as talking to community leaders of various national origins. Numerous interesting facts thus came to the surface. For example, the pupils learned that if an Indian program was to be presented, pork should not be served to the distinguished guests from that country as many Indians do not eat this meat for religious reasons.

Interested members of the staff contacted friends and acquaintances of various national groups who occupied positions of honor. Samuel Abrahamsen, a faculty member and the first licensed teacher of Norwegian in New York City, got in touch with friends in the Norwegian Consulate and Embassy. Leopold DeMaio made contact with several widely known Italian companies and societies whose directors he knew intimately. Other members of the staff worked through similar channels in establishing relations with community national groups.

The lay advisory council was also busy at work. William Kostecki, for example, was contacting prominent Polish community leaders. Patrick McDonald held discussions with the members of the Irish Consulate and prominent Gaelic-American citizens. Other members of the council got in touch with the national groups with which they were affiliated. Thus staff, students and community cooperatively worked on the design of the program.

The third stage of development was the actual implementation of the ideas gathered by the analysis and set into an organizational framework by the design. Toward this end several joint meetings were held, and it was finally decided that the imple-

mentation would come in the form of the "Heritage Program." This was a day-evening affair in which every national group would have an opportunity to demonstrate how it has contributed in its own way to the development of a richer America and how it has made Bay Ridge a better place in which to live. Each group was given a different day to make its presentation. The actual program would be given for the students in the assembly period and for the community people in the evening.

For two weeks preceding the public presentation the national group featured national displays throughout the foyer and corridors of the school. An importing firm loaned fine Italian silks for the Italian display. Syrian children displayed rich oriental rugs. Irish firms sent fine linens. Teachers brought in Baleek ware. Norwegian students furnished samples of silverware and knitted goods. And so it went. During this two-week period the local newspapers carried stories on the program, urging the people of the community to visit the school and examine the displays. Pupils dressed in native costume acted as guides to explain the arts, crafts and exhibits. The school was more and more becoming the center of community focus.

Choose national holidays

The day on which a program was to be presented was always propitiously chosen to coincide with some event significant in the life of the nation represented. Thus for example, the Norwegian Heritage Program was held on May 17, the anniversary of the adoption of the Constitution of Norway. The lay advisory council arranged for distinguished persons to be part of the program. Some were well-known artists from the concert stage who gave their services gratuitously to this program. (A number of these artists wanted to look over the program ahead of time as their contracts provided that they must not appear on the stage with performers of lesser ability or stature; when informed that the youngsters would share the stage with them, these artists were truly overjoyed

and promised to do their utmost to make the program a success.) Ambassadors, consuls general, deputy mayors, concert artists of the international stage, United States Senators, college presidents—these were the type of guests the program attracted. But the youngsters were the highlight of the program. They acted in pageants that depicted life in the old country, danced to folk music and wore the costumes of that country. It was significant that pupils of various nationalities contributed heavily to other groups as well; thus pupils of Italian extraction danced and sang in the Polish heritage program.

Corridor analysis

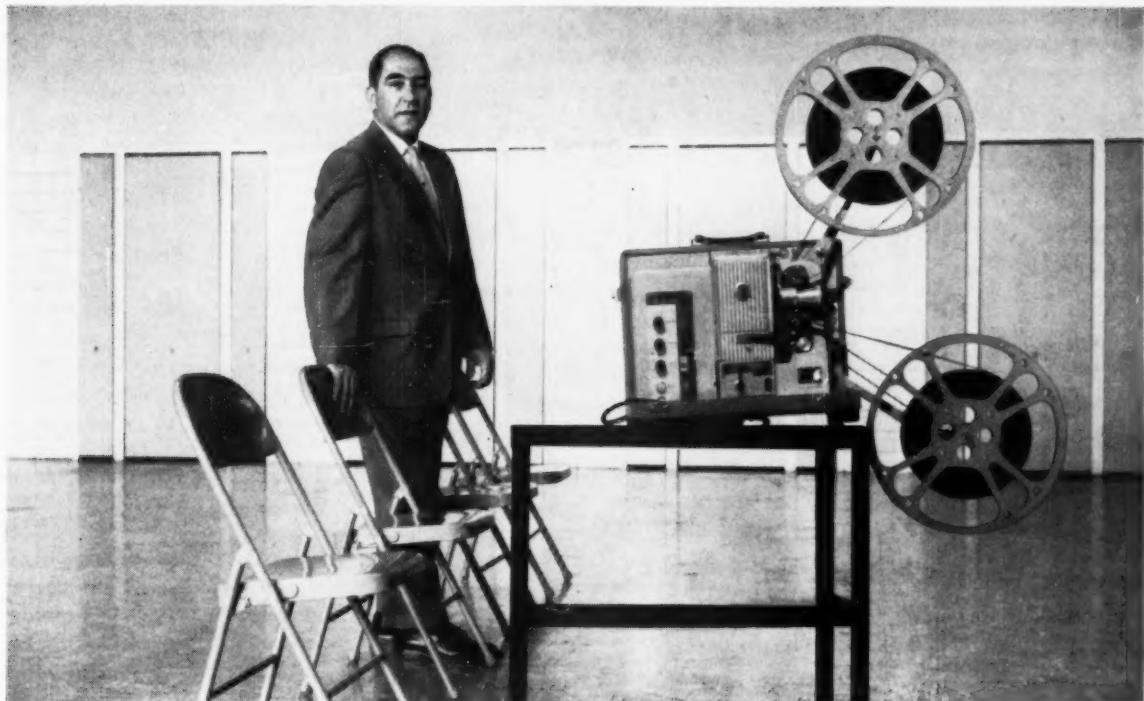
The final stage in this community-school relationship, evaluation, was carried on in the same informal but effective way as was the analysis. For the students, "corridor evaluation" was very popular. Their enthusiastic between-class discussion of the program spilled over into the classroom work, and several days were spent in the various classes assaying the values and outcomes of the program. The staff appraised the program at luncheon get-togethers and faculty meetings. The lay advisory council carefully weighed the outcomes of the program with special attention to the cross-cultural understandings derived from it. Letters from community citizens and from the distinguished guests agreed that their horizons were broadened by the program. Letters in the press confirmed this.

The students, staff and community felt that the program did much to deepen their understanding of their fellow citizens. Community interest in various national cultures was definitely heightened as a result of the program. The press reported that the positive concept of brotherhood had clearly replaced the negative idea of tolerance in many parts of Bay Ridge. Thus, through the Heritage Program, the school improved the community in the important job of living together and in the understanding and appreciation of the contributions of its various subgroups.



Kodak

At the new Orchard Hill Elementary School, Leetonia, Ohio, selected by A.A.S.A. for its exhibit of outstanding school designs, George Trombitas, Assistant Principal, says:



**"We're a country school with ambitious ideas involving A-V aids...
We can't tolerate A-V equipment that requires frequent servicing...
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Democratic Leadership

Does it abrogate executive responsibility?

by HOWARD K. HOLLAND

THE BEST TEACHER I know recently changed schools after a decade of upgrading the language arts program of a first-rate high school. "We have no leadership," she told me. "After ten years of good headway, we lost our principal. The new man has put us back to our beginnings."

A grade teacher recently complained: "If our supervisor would stop trying to coordinate, maybe the administration could tell us what's expected in this school."

Such words spoken between teachers dramatically show the importance we place on effective administration. For such statements (admittedly spoken in a minor number of cases) emphasize the coming of age of educational leadership. When dynamic, mature leadership is not exhibited nowadays, our teachers feel justified in complaining.

Such was not always the case, for during the late twenties through the forties, administrators were trying to

operate under a philosophy which denied certain basic truths about people. This inadequate philosophy was summed up in the phrase "democratic leadership," and any school executive who refused to subscribe to it was labeled "authoritarian" or "tyrannical." The dying spasm of this loose bundle of ideas is likely to be one cause of poor administration today.

Included under the heading of democratic methods was the theory that the leader was never supposed to take a definitive stand on any educational issue. He was, instead, to serve as a sounding-board for his faculty. He was to encourage free interplay of opinion among his teachers, to summarize from time to time, to guide gently if the discussion became too random.

The sanction for such ideas was respectable enough two decades ago. Bedded on the foundations of functional psychology, it was seriously believed that teamwork, efficiency and, above all, group motivation would be greater if the leader was not "aggressive."

The fact is that when superiors act as gentle guides there is little leadership. The theory has never worked. Teachers knew it immediately and quietly grumbled about it. Successful administrators kept their peace about the educational theory and did their leading in the ways that came naturally to them.

Another side of the outmoded idea was that the good principal or supervisor was not to have his own pre-arranged purposes and goals for his group. He was to work with the group, allowing its purposes to "emerge" as the true aims. During this era, no conference was to begin without the leader and teachers having planned goals together.

Indeed, the practice so slowed inter-faculty production that many teachers left the profession in disgust, turning instead to more realistic endeavors where time is money and employers protected their workers from having to assume the responsibilities of the executive.

If there is any single requirement more important than another in leadership, it is the unique ability to

Dr. Holland is professor of education at the College of William and Mary, Williamsburg, Virginia.

apply broad knowledge to creative expectations. This is the meaning of good planning. The true leader has the best overall picture of the educational enterprise. Aims and purposes are his to fashion. They are also his to modify in the light of teacher opinion, providing he is convinced that such opinion makes desirable contributions to the aims.

A ridiculous extreme

To be certain, there is frequent need to find out what teachers or patrons want. But educators in the past have carried this step to a ridiculous extreme. Most people have fragmentary ideas of what they want, although usually they are happy to have someone who knows his business clarify these ideas in their minds.

This is not undemocratic. On major issues the people are always to be depended upon. To require them to specify the meaning of their opinions is to give to a group the job of the leader. Even in such professional problems as planning for in-service training or in the consideration of certain issues such as reporting or retention or pupil control in corridors, aims and purposes should be first thought out by the administrator. Thereafter they should be presented to the teacher group with the sincere desire to make reasonable changes.

Probably the most unrealistic aspect of "democratic" leadership was its assumption that the leader was not supposed to impose his personality or ideas upon any of his staff. Some school supervisors would never approach a teacher; the teacher had to come to them.

The old theory held that personal growth and improvement on the part of teachers could result only when the desire for such growth came from them. To be sure, a supervisor or director of instruction or principal could set the stage—could obliquely nudge toward professional proficiency. But they were not allowed actively to direct, to praise or blame, to inspire.

I know some school leaders who still refuse to rate the caliber of teaching of those with whom they work. "Who am I to judge?" asked

one, implying that evaluation might impair future progress. Also, the thought is voiced that teachers won't work happily for a supervisor who rates their work.

To make progress in administration in our time requires the acceptance of a few fundamentals, all as old as organized society.

The first fundamental is that all those concerned must accept the fact that the gifts of leadership are unequally divided. Most people do, indeed, prefer to be led. This implies the necessity of intelligent follower-ship.

More important, it requires that those who find themselves in positions of authority work actively to do better the things which only they can do. False humility ruins many a leader. After all, who among men isn't a recipient of personal gifts? Much is expected from those to whom much is given.

The second fundamental has to do with broad characteristics peculiar to leadership. We know, of course, that leaders are often above average in health, energy and intelligence. But we find more important facets in the leaders' qualitative characteristics. Courage heads the list. Courage requires convictions, ability and a willingness to suffer both physically and mentally. The virtue of fortitude is only displayed by persons of great integrity who, by an almost mysterious process, possess tremendous moral strength and are able to convey this tacitly to their followers. We see this in the great military geniuses, in some statesmen, in the other great leaders of our own times and times past.

Impatience with failure

Self-confidence seems to be born of fortitude. Lives of fine leaders show that self-reliance (of the Emersonian variety) produces a disregard for the petty pleasures of life. It really produces an impatience with failure, the true leader being resilient and able to start again at his beginnings without complaining about fate or other people.

The inclination of others to turn to him is perhaps the spring of his effectiveness. A good leader often

inspires his followers. The characteristic of the trained leader—often found in the military, labor and industry—is that he looks upon motivating his group as a primary responsibility. He recognizes his own abilities in this direction and consciously uses them for the good of all. Sometimes this is called building spirit or *esprit de corps*.

The third fundamental has to do with the leader's capacity to take directions. This is one of the worst stumbling blocks, because human nature seems to have a built-in tendency to desire all power, once a little has been gained. In some of our schools you will find many such little tyrants and educational dictators.

Loyalty up and down

Stature is achieved when leaders frankly admit to themselves that obedience and loyalty on their own parts are desirable and necessary. Loyalty up and down the line is taught in our service academies to the men who must lead thousands in war. The experience of over a century of school administration has shown that loyalty to those above is the proving ground for those below. And when the leader gets to the very top, the maximum obedience is required. To obey a board, or commission or constituency is hard. To obey these in the light of one's own highest principles is the mark of greatness.

These, then, are the coming-of-age signs of school leadership. The good supervisors, directors, principals and superintendents have learned the pitfalls of the false psychology which demanded leadership behavior contrary to the wisdom of centuries of human experience.

The fine leader in our schools is the person with unusual talents for working with people. He recognizes these in himself and humbly dedicates them to the good of the group. His inner characteristics include courage, self-confidence and the urge and ability to inspire those with whom he works.

Above all, he is a master in taking orders. His maturity is built upon loyalty. He never progresses so far upward that he loses his ability to obey.



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School District Gets Stay In Bible Reading Decision

ABINGTON, Pa.—A stay of proceedings has been granted to the school district of Abington Township, whose practice of having students read from the Bible and recite the Lord's Prayer daily was recently enjoined by a U. S. District Court. The trustees of the district will appeal the case to the U. S. Supreme Court.

A Pennsylvania law provides that at least 10 verses must be read from the Bible at the opening of each school day. Any teacher who fails to enforce this ruling can be discharged from the school system.

The law was recently challenged by Edward Lewis Schempp and Sidney Gerber Schempp, parents of three Abington Township students and members of a Unitarian Church in Germantown, Pa.

The plaintiffs asked the court to declare the law unconstitutional and to enjoin the expenditure of funds for the purchase of Holy Bibles. This last injunction, when not pressed by the parents, was treated as abandoned.

All three Schempp children testified at the trial. The two younger children testified they had never protested the Bible reading practice to their teachers, but the oldest child, Ellory, said he did complain of the practices and demonstrated his objection by reading a copy of the Koran to himself while the Bible was being read.

He testified also that he did not believe in the divinity of Christ, the Immaculate Conception, or the concepts of an anthropomorphic God or the Trinity. All of these doctrines were read to him at one time or another during the course of his instruction at Abington High School, he said.

At one time, Ellory testified, when he asked to be excused from attend-

ance at the Bible reading ceremony, he was told he should remain in the home room and attend the ceremony as did the other students.

Solomon Grayzel, a Jewish Rabbi testifying for the plaintiffs, gave as his expert opinion that material from the New Testament could be explained to Jewish children in such a way as not to harm them, but if portions of the New Testament were read without explanation they could be psychologically harmful to the child.

Dr. Grayzel cited the washing of hands by Pilate and then the verse: "Then answered all the people, and said, 'His blood be on us, and our children.'" Dr. Grayzel said this verse had been the cause of more anti-Jewish riots than anything else in history.

Testifying for the defense, W. W. Young, teacher at the senior high school, said that students assigned to read the Bible could use texts of their own choosing and had, at various

times, used the King James version, the Douay version and the Jewish Holy Scriptures.

The assistant principal of Ellory's school testified that he had required Ellory to remain at the Bible reading ceremonies "to show respect and . . . simply to obey a school rule; that matters of conscience and religion were not as important here as merely conforming to the school rule."

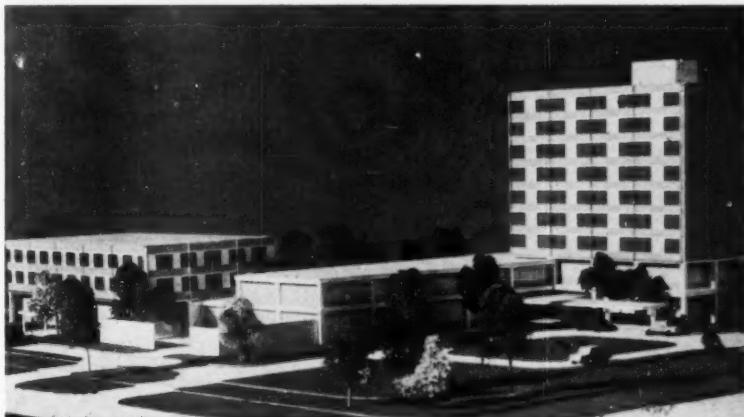
In rendering its decision, the court gave these arguments:

1. "To characterize the Bible as a work of art, of literary or historical significance, and to refuse to admit its essential character as a religious document would seem to us to be unrealistic."

2. "The daily reading of the Bible, buttressed with the authority of the State and, more importantly to children, backed with the authority of their teachers, can hardly do less than inculcate or promote the inculcation of various religious doctrines in childish minds."

3. "It cannot be contended successfully that where a course of conduct is compelled for school teachers

Towards the Continuance of Education



The \$3 million Nebraska Center for Continuing Education (above) will be located on the College of Agriculture campus of the University of Nebraska. The main area, to be used for the updating and refreshing of professional training, will consist of a tower and two wings. The youth center, to be used for the stimulation of vocational training, will consist of three stories and a basement.

and school superintendents, they will not use every effort to cause the children committed to their guidance and care to form an audience for the reading of the Bible according to the terms of the statute."

To support its contention that Bible readings carried a subtle form of persuasion, the court wrote: "The law of imitation operates, and non-conformity is not an outstanding characteristic of children."

Judges Express Opinions On Function of Education

NEW YORK—Some interesting legal opinions on the function of education grew out of the dismissal of a Brooklyn College student here.

Arthur Steier was first suspended in 1955 when he wrote two "intemperate and bitter" letters to Harry D. Gideonse, president of Brooklyn College. In 1956, after being permitted to register, he published the story of his "probation" in the college newspaper. This last action brought about his dismissal.

Mr. Steier brought the case to court, contending that the dismissal abridged his constitutional rights under the 14th Amendment. When the Brooklyn Federal Court dismissed the action, it was appealed to the U. S. Court of Appeals.

Though the higher court upheld the dismissal on the grounds that acceptance of the case would be arrogation of a purely state function, the written opinions of two of the judges show basic disagreement on the whole function of education.

Chief Judge Charles E. Clark, in his dissenting opinion, wrote, "Surely the city's public education system has failed in its purpose when for its own assumed self-protection it must deny all its benefits to one whose only apparent transgression is a persistent and even irritating spirit of independence."

Judge Leonard P. Moore, on the other hand, wrote in a concurring opinion that "One of the primary functions of a liberal education to prepare the student to enter a society based upon principles of law and order may well be the teaching of good manners and morals."

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Children learn about gardening



For seven years, a program developed by the National Garden Bureau has been helping children learn about plant life and gardening. From February to September each year, the Children's Garden at the Brooklyn Botanic Garden is divided up into small plots, each of which is assigned to one or two children to work. A similar community project, conducted during the war years by the Rockefeller Institute in New York, is now restricted to children of Institute employees. The National Garden Bureau is anxious to encourage other such projects.

From "Delinquent Behavior: Principles and Practices"**

- Emotionally disturbed children scored significantly lower on group IQ tests.
- The incidence of delinquency is $4\frac{1}{2}$ times higher among children with low IQ's.
- Emotionally disturbed children scored significantly lower on reading and arithmetic achievement tests.
- In heterogeneous classes, the child tends to develop aspiration levels from his brighter peers; and frustration often results.
- The ideal teacher reduces tension by avoiding undue competition and emphasis on marks.
- Emotionally disturbed boys showed more dissatisfaction with self and their school behavior than the other boys.
- In view of his generally unfavorable home and family background, marriage and parenthood training is particularly important for the norm violator.
- Requiring pupils to make apologies, even in private (and certainly in public) seems unwise.
- Socially acceptable behavior is never taught to children by severe punishment.

* published by the NEA's Juvenile Delinquency Project.

NAEB Adds 5 Stations; Membership Now 105

URBANA, Ill.—The National Association of Educational Broadcasters has added one AM and four FM stations to its roster, bringing total membership to 105 stations.

Latest stations to join the network are: AM station WOUB, Athens, Ohio; and FM stations WOUI, Athens; KPFK, Los Angeles; and KPFA and KPFB, both in Berkeley, Calif.

NAEB's network is a self-supporting operation which distributes recorded educational programs at the rate of a thousand tape recordings a week. In addition, ten hours of programming a week, plus in-school service, are offered to members.

The network was started ten years ago as an NAEB operation from WNYC, New York City. In 1951, a grant from the W. K. Kellogg Foundation enabled it to become firmly established.

More than half of the programs are produced by NAEB stations. The remainder come from such organizations as Georgetown University, Cooper Union Forum, foreign broadcasters and through co-operative arrangement with the National Educational Television and Radio Center.

NAEB distributes programs of music, lecture programs, discussion panels, children's programs, interviews, and documentaries, as well as in-school programs.

Book Describes Operations Of U. S. "Degree Mills"

WASHINGTON, D. C.—A strong plea for concerted action by the states and by the Federal Government to put an end to the "diploma mills" which are taking in an estimated \$75 million annually and heavily damaging U. S. prestige abroad is made in "American Degree Mills," a study of the problem by Robert H. Reid.

The faculties of these "institutions of higher education" are usually untrained, says Mr. Reid, if not actually nonexistent. The time and effort required to complete the course of study are a drastic telescoping of what is required in the usual curriculum, students are often unqualified for any program of higher education and "the officers are unethical self-seekers, whose qualifications are no better than their offerings."

Author Reid tells of one such institution which ran an advertisement in a Scandinavian ministers' journal in 1952 offering doctoral degrees in philosophy, theology and psychology to Scandinavian pastors. Two "students" were drawn into an "educational" arrangement through this advertisement.

These "diploma mills," which call themselves colleges or universities, have as many as 750,000 students annually, says Mr. Reid, many of them in other countries, and they are causing foreigners to question the integrity and quality of all American education.

The system is extremely difficult to explain to nationals of other countries, since there is no single yardstick for accreditation in this country. Foreigners simply cannot appreciate "that a country can have educational standards unless there is a federal agency controlling such matters."

Years ago, the U. S. Consul General in Germany reported to the U. S. State Department that this traffic in American academic degrees had made the American doctor a

"questionable honor on the European continent" and an object of suspicion by public and police in Germany.

There are at least 200 such degree mills operating in 37 states. "The solution demands better legal machinery than now exists," says Mr. Reid, including the adoption of uniform legislation to set minimum standards for the licensing and op-

eration of all institutions of higher education.

The prospects for control are not bright, since ours is a country which prides itself on "diversity of educational opportunity and the sanctity of local educational initiative," but he feels that congressional hearings would at least give ammunition to the agencies now fighting these operations.

"American Degree Mills," published by the American Council on Education through its Committee on Educational and International Affairs, is available from that organization for \$1.

And Away We Go



AS A TEMPORARY SOLUTION to the overcrowding of its schools, one Eastern school system has placed an order for ten 12- by 48-foot mobile classrooms to accommodate 40 pupils each.

The trailer-type units, to be attached alongside already existing

buildings on a permanent foundation, can be hauled to other schools as the need arises.

Special features of the classrooms-on-wheels include built-in blackboards, asphalt tile floors and acoustical ceilings. The floors and ceilings are insulated with Fiberglas.

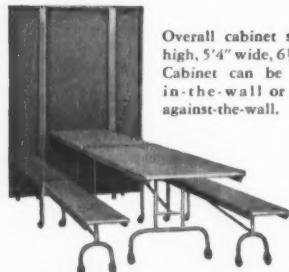


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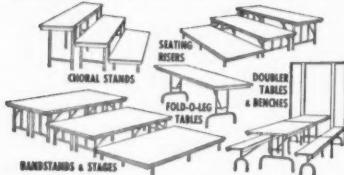
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SPOTLIGHT

College Faculty Shortage Makes a Teachers Market

"THE FACULTY NEEDS of higher education in the next decade are quite likely to double," an official of the U. S. Department of Health, Education and Welfare recently told a convocation of graduate students at the University of Michigan.

Homer D. Babbidge stressed the importance of the National Defense Education Act in meeting this grave need. "The graduate fellowship program, as one part of the Act, will provide some of the means to increase the supply of college and university teachers," he said.

To encourage more talented people to go into college teaching, the Woodrow Wilson National Fellowship Foundation recently sent a letter to 20,000 young men and women who had received recognition

through the National Merit Society.

"A college teacher," says the letter, "deals 'with the spirits of men, not with their fortunes,' and lives in a world where the search for truth never ends . . . consider the rewards of a life devoted to teaching and scholarship."

As a more practical incentive, W. J. McKeachie, professor of psychology at the University of Michigan, points out that the severe shortage is making it "a teachers market." In fact, he said, "the small colleges with their limited financial resources will be hard pressed to meet the salary demands."

The University of Michigan Bureau of Appointments and Occupational Information reveals that starting salaries for college teachers with Ph.D. degrees have increased about \$1,000 in the past five years.

The shortage is most acute in the fields of engineering, chemistry, physics and mathematics, and in specialized areas such as library science, industrial arts and elementary education.

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SPOTLIGHT**Poor Financing, Pressures Threaten Basic Research**

"CRISIS IN BASIC RESEARCH," an article in the September issue of *Think* magazine, makes a plea for greater support for science research in universities.

"Only in the universities can the unattached though dedicated scientist find conditions that give free scope to his creative urge," says N. J. Berrill, author of the article. "Only from such individuals can we expect revolutionary scientific insights or radically new scientific syntheses."

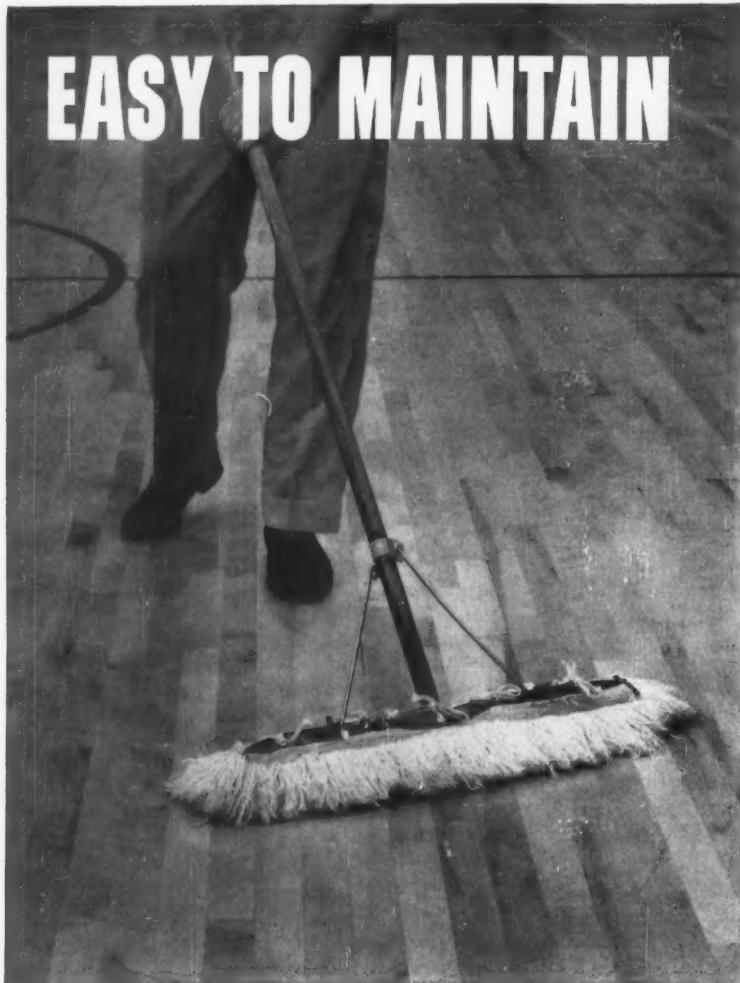
But even in the universities, the conditions necessary for basic research are deteriorating, says Mr. Berrill, partly because university salaries cannot compare with industry or government salaries, and partly because even in universities, pressure is being exerted on scientists to work along more practical, productive lines.

Delegates from 65 Nations Attend Medical Conference

CHICAGO—More than 1,500 educators from 64 foreign countries and the U. S. attended the second World Conference on Medical Education held here recently. Some 125 scientific papers were delivered during the 6-day meeting to the delegates who listened to simultaneous translations of the addresses into English, French and Spanish.

Approximately 200,000 students are studying in 87 Russian medical schools, Zigmantas I. Yanushkevichius of Kaunas, Lithuania, told the conference. These schools are staffed by 19,600 professors. Lithuania, the doctor reported, has one physician for every 600 inhabitants, compared with one doctor for each 720 persons in the U. S.

Bernardo A. Houssay, professor in physiological research at the University of Buenos Aires, Argentina, told the delegates that one can be an investigator without an aptitude for teaching but, he said, "the best modern teachers are active investigators."



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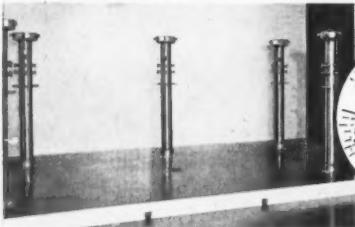
Example of Wash and Shower room floor layout

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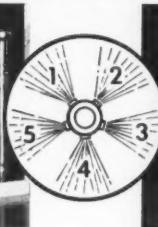
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**Educators in the Headlines**

• Everett J. Soop, director of The University of Michigan extension service, has been named executive committee chairman of the Michigan Coordinating Council of State College Field Services.

• Richard H. Heindel, president of Wagner College, has been appointed to serve as a member of the Advisory Committee on Language Development. The language development program is specifically concerned with implementing Title VI of the National Defense Education Act.

• G. Derwood Baker, for 13 years a professor of education and director of the Center of School Services at New York University, has been assigned by UNESCO as an advisor for the program of school expansion in Indonesia.

• J. James McPherson, chairman of the audio-visual education department at Wayne State University, has been named to the staff of the educational media branch of the Office of Education.

• Corma Mowrey has been appointed associate director for the NEA's lay relations. Dr. Mowrey is director of the Division of Professional Services of the West Virginia Educational Association.

• Reuben G. Gustavson has retired as president and executive director of Resources for the Future, a non-profit corporation established in 1952 to advance the development, conservation and use of natural resources through research and education.

• George F. Ostheimer has been elected general superintendent of education of the Indianapolis Public Schools succeeding Herman L. Shibley. Dr. Ostheimer was formerly assistant superintendent in charge of staff personnel.

argus ...the bright
new name in audio-visual systems
presents...



THE NEW ARGUS DIRECT-WIRE TV CAMERA AT JUST \$595!*

Argus Direct-Wire TV is the first closed-circuit TV system ever developed for mass production and mass use. It's yours for $\frac{1}{3}$ the cost of other systems!

No installation . . . set it up anywhere—Argus Direct-Wire TV weighs only 16 pounds, mounts on a standard tripod indoors or out. Normal room illumination is all you need for a sharp, steady picture.

Direct hook-up to any TV receiver—Argus Direct-Wire TV transmits over standard co-ax cable, which connects directly to the antenna connection of any standard TV set. Transmits a perfect picture up to 1000 cable feet without boosters. With boosters, the range is unlimited.

Built-in flexibility . . . three-lens turret—Argus Direct-Wire TV feeds any number of receivers under the same conditions mentioned above. Up to five cameras can be used with one receiver, each with its own channel. *Standard equipment: three-lens turret mount and one 1-inch, f:1.9 lens. Argus Telephoto and Wide-angle lenses, shown above, are available as accessories.

Exclusive Argus features — • Matching, companion Argus TV receivers and monitors are available from \$179.95. • Can be serviced by any Radio-TV repairman. • All parts are standard TV parts. You can own a complete, balanced Argus Direct-Wire System for less than the cost of a competitive camera alone.

argus Audio-Visual Systems Department, Building C
Division of Sylvania Electric Products, Inc., Ann Arbor, Michigan

I'd like more information on Argus Direct-Wire TV.

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Organization _____

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SPOTLIGHT

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AO Spencer Opaque Delineascope

SO EASY Teaching and learning are much easier with this unique delineascope. You just flip a switch to project a big, bright picture of your teaching materials exactly the way you want to show them...subjects become dramatically alive...and your class responds as a unit. You teach more effectively because you show what you mean. Learning is more fun this way.

SHARPEST IMAGE Coated objective optics cut internal glare and reflection. With the exclusive all-glass reflecting system, this guarantees a sharp, crisp image on the entire screen...edge to edge...corner to corner.

1,000 WATT INTENSITY High-powered illumination shows a clear, detailed picture in a semi-darkened room, or even a normally lighted room with shades up. The entire system is cooled by a quiet, motor driven fan...a constant stream of air over projected copy keeps it safe.

STURDY, PORTABLE The delineascope is built of rugged, light-weight, lifetime aluminum. Carry it anywhere. Precision mechanical fitting throughout assures permanent optical alignment.

Colorful, instructive 8 page BROCHURE available—Just clip and mail the coupon below for complete details and specifications.

Dept. W71

Please send me AO Spencer Delineascope
Brochure #SB3500.

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**American Optical
Company**

INSTRUMENT DIVISION, BUFFALO 15, NEW YORK

Statistically Speaking

- Between 45 and 60 percent of all fires in which arson is a factor are set by youths between the ages of 12 and 18. These percentages would go up another 10 or 15 points if the cause could be established for thousands of fires in which the origin is listed as "unknown."

- The world average ratio for students who will attend college is 150 of each 100,000 persons. This figure is much lower in the depressed areas of the world, and rises to some 500 out of every 100,000 in the United States, Russia, Argentina, Japan, Israel, New Zealand, and West Berlin.

- Approximately 90 percent of the 675 freshman who entered Columbia College this fall presented three years of satisfactory study in one foreign language or more in high school.

Education Week Celebrated By 26,000,000 Citizens

WASHINGTON—An estimated 26 million parents and other citizens will attend local observances of American Education Week this month.

These parents will take "teacher tests" to find out how much they don't know about teachers, will learn the answers to questions most frequently asked about school boards, and will find out the latest facts on foreign language-learning.

They'll receive this education via new AEW-distributed material covering the most newsworthy aspects of current education problems and keyed to the theme, "Praise and Appraise Your Schools."

Information concerning seven separate groups is contained in this material: the child; the parents; the teacher; the people next door; the school board member; the adult citizens; and the voter.

American Education Week is sponsored jointly by the National Education Association, the American Legion, the U. S. Office of Education and the National Congress of Parents and Teachers.

Tennessee Seeks to Close Interracial Folk School

ALTAMONT, Tenn.—The Highlander Folk School here, whose avowed purpose is to train officials and leaders of labor unions in the techniques of organization, will be placed under padlock pending hearings should a judge grant a petition filed by District Attorney General Albert F. Sloan.

The District Attorney has requested the order on the grounds that Highlander has become a "public nuisance" and that it "harbors and protects" persons violating criminal laws.

A controversial institution for 27 years because of its liberal racial policies and programs, Highlander has been defended frequently by such nationally known liberals as Mrs. Franklin D. Roosevelt and the Rev. Martin Luther King, Jr., the Montgomery, Ala., bus boycott leader.

Massive Resistance Policy Is High Court Compliance

THE "MASSIVE RESISTANCE" policy is just as surely compliance with the Supreme Court decisions as is integration, says Forrest P. White in a recent issue of the *Atlantic Monthly*.

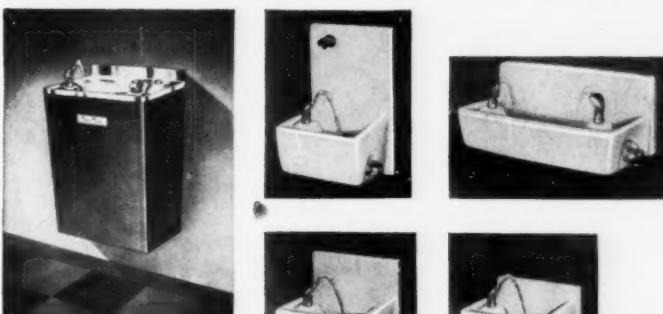
Dr. White is president of a Norfolk citizens' group organized to get their children back in school. This group, says Dr. White, works neither for integration nor for segregation, but for public schools.

One of the basic segregationist arguments, says Dr. White, is "that the Supreme Court has made an 'unconstitutional' decision." Moderates counter this argument by pointing out that closing schools is just as much compliance with this decision as is integration, and much more harmful to the South.

"A moderate in the South today," says Dr. White, "is not one who works for school integration. Rather he is a person who works for reason and sanity and racial peace, no matter what his personal feelings are about the wisdom or legality of integration."

November, 1959

They're TAYLOR-made... they're streamlined



* It's new, it's a Halsey Taylor first.... the WALL-MOUNT Cooler. Mounted on the wall, off the floor! No exposed fittings, easy to keep clean, no corners to catch dirt!

Ultra modern, recessed and face-mounted fountains, and battery types as well! The last word in performance and appearance.

..built for today's modern architecture

To get the newest in fountains or coolers, all you need do is to specify Halsey Taylor. Then you know you can meet the most modern architectural decor! Ask for latest catalog or see Sweet's.

The Halsey W. Taylor Co., Warren, Ohio



When space must grow with enrollment...

Use PELLA DOORS to multiply the use of floor space. With "Lamicor" solid wood panel construction and steel spring hinges, patented PELLA WOOD FOLDING DOORS are ruggedly built to withstand constant, severe use. PELLA DOORS are available in these SIX genuine wood veneers:

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***** MAIL COUPON, PLEASE *****
ROLSCREEN COMPANY, Dept. K-25, Pella, Iowa
Send me the helpful booklet of ideas on many ways to use PELLA WOOD FOLDING DOORS.

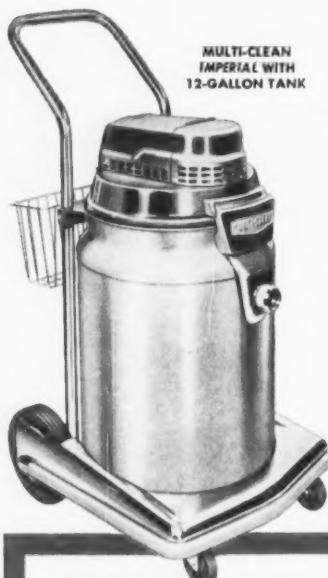
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CITY & ZONE _____

STATE _____



MULTI-CLEAN
IMPERIAL WITH
12-GALLON TANK

SE-250

SPOTLIGHT

Arlington County Increases Integration Without Incident

ARLINGTON, Va.—Arlington County increased its racial integration this fall without incident. Twelve more Negroes were enrolled at three schools.

The increased integration was made possible by changes in Virginia's "massive resistance" laws. The changes make it possible for communities to adopt their own attendance laws. Formerly, these decisions could be made only in Richmond, the state capital.

This is the second year of integration for Arlington County. In other localities in Virginia, the picture ranges from substantial compliance to the ultimate in resistance.

Planning Specialists Form Professional Study Group

EAST ORANGE, N. J.—Specialists in educational plant planning have established a new professional study organization to serve 11 states of the Middle Atlantic and New England areas.

Tentatively called the Northeast Council on Schoolhouse Construction, the group will deal with school and college plant problems of concern to members of these regions.

Charter members include those attending the organization meeting held here, as well as those present at a similar meeting held last May in Framingham, Mass. Nearly all are members of the National Council on Schoolhouse Construction.

Frank C. Wilson, supervisor of school structural planning for the N. Y. State Department of Education, is president of the new group. Vice president is William B. Black of the Massachusetts School Building Assistance Commission, and secretary-treasurer is Harold W. Miers, N. J. State Department of Education.

The three officers, together with a 4-member board of directors, plan to devise a set of bylaws for action by the members at the group's next

Before you buy a Vacuum Cleaner ...ask the Salesman these questions

How often must we replace brushes?

Stabilized motor brushes are an exclusive, patented Multi-Clean feature. Tests show their average life is 1,000-1,500 operating hours vs. 250-500 hours for standard brushes.

Is the filter washable?

Multi-Clean's patented filter is made from a quick-drying washable synthetic fibre which won't rot or mildew.

Does tank have a gravity drain?

Multi-Clean IMPERIALS have a convenient non-clogging gravity drain. Makes it easy to empty tank without disturbing the head.

Does it have two casters?

The practically tip-proof IMPERIAL has 2 big wheels plus 2 casters (instead of the traditional 1). This greater stability is important, for a 17-gallon Vacuum Cleaner weighs about 300 lbs. when full.

Is the cable detachable?

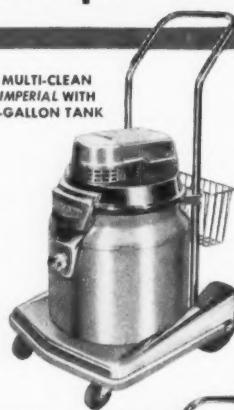
30-foot, 3-conductor IMPERIAL cable has same twist lock connector as most Multi-Clean Floor Machines. If you wish, same cable can be used for both.

And what about other features?

Other important advantages you gain when you buy a Multi-Clean IMPERIAL: By-pass motor cooling system . . . automatic shut-off to protect motor from water . . . improved design of clamp which holds power head . . . large wheels which facilitate moving up and down stairs or from building to building . . . wide choice of attachments.

For more information on the new IMPERIAL Vacuum Cleaners, see your local Multi-Clean Distributor . . . or write directly to factory.

MULTI-CLEAN
IMPERIAL WITH
5-GALLON TANK



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IMPERIAL WITH
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MULTI-CLEAN PRODUCTS, INC.

Dept. SE-72-119, St. Paul 16, Minnesota



To shed light is to serve...



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American Seating brings the facts



about school furniture out in the open



WE'D LIKE TO refresh your thinking on the importance of school furniture.

First, a student spends an average of 15,000 hours* sitting in school. We believe this fact not only emphasizes the importance of purchasing the correct school furniture, but points up the *necessity* for furniture that provides the utmost in postural advantages and structural features.

That is why a manufacturer who seeks constantly to improve his product by making substantial investments in original research and development and in modern manufacturing facilities is best qualified to serve you.

These facts, plus many more, are reasons why American Seating school furniture outsells every other make. Why not arrange for a demonstration in the privacy of your own office—and send for our new booklet, *The Facts about School Furniture Today*. Remember, American Seating quality is yours at no extra cost. American Seating Company, Grand Rapids 2, Michigan.

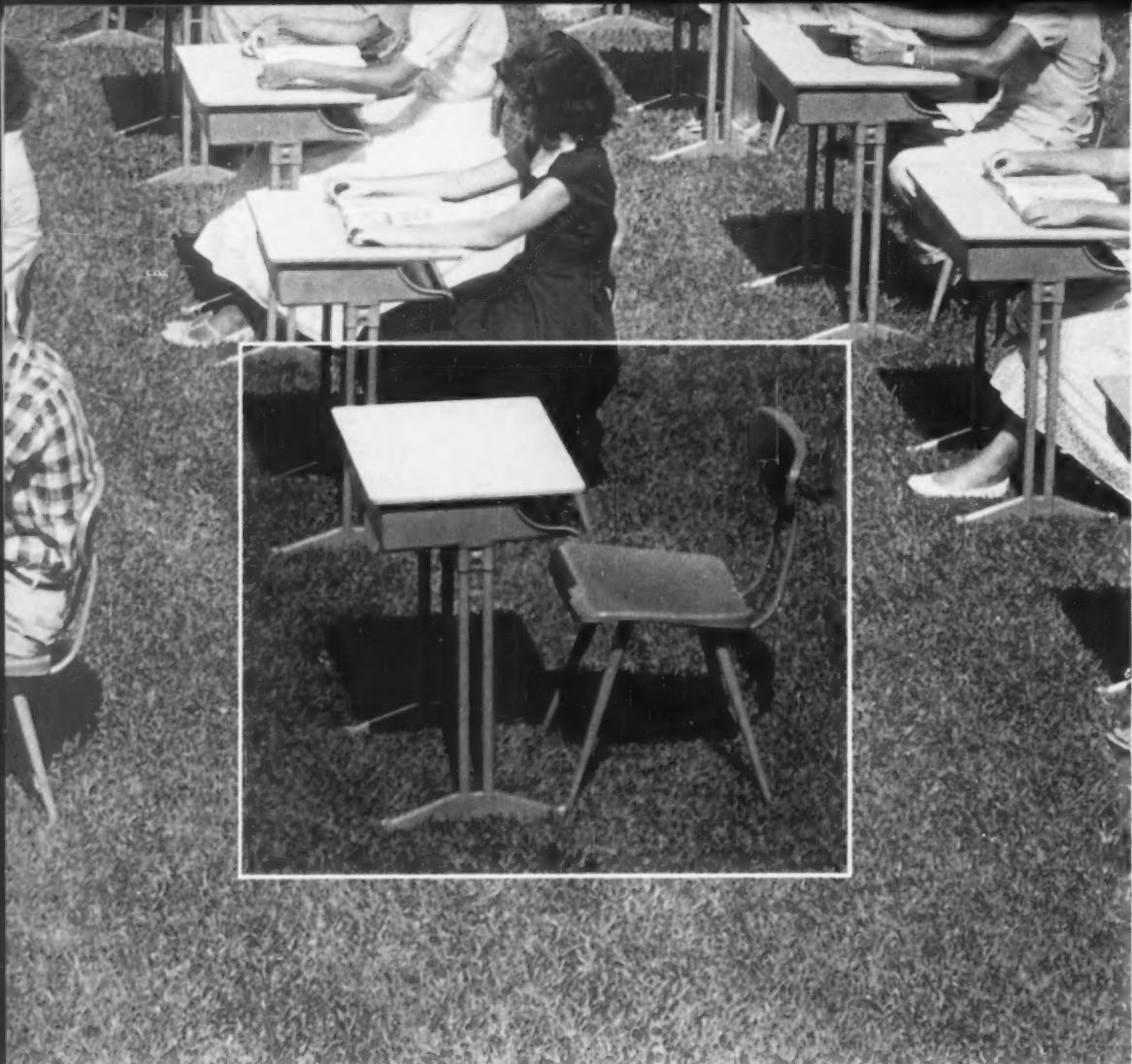
*Time spent seated by average student, kindergarten through college.

**AMERICAN
SEATING**

The standard by which all other public seating is measured

CLASSMATE® SCHOOL FURNITURE • INDIVIDUAL STUDY-CENTERS • UNIVERSAL® SCHOOL FURNITURE • ENVOY® SCHOOL FURNITURE • BODIFORM® AUDITORIUM CHAIRS • STADIUM SEATS • CHAPEL FURNITURE • FOLDING CHAIRS AND TABLES

Out in the open for all to see: American Seating Classmate Open-Front Unit Tables and Chairs in a typical arrangement, with Classmate Round Table and matching teacher's desk. Photographed at beautiful Florida Cypress Gardens.



Classmate Unit Table's pedestal standards save valuable floor space in schoolrooms.

A message for you

There must be reasons why American Seating School furniture outsells every other make year after year. There are:

Posture development is one. For example, double-offset back braces in Classmate Chairs let occupants sit back *into* the seat, while curved, self-adjusting back gives full lumbar support.

Properly designed book-boxes, easy desk-height adjustments, are others—as in Classmate Open-Front Unit Tables.

Today American Seating School furniture offers more new advances and more use-values than ever before. If you haven't seen a demonstration lately, arrange one soon. Meanwhile, send for our new booklet, *The Facts about School Furniture Today*.



The standard by which all other public seating is measured
GRAND RAPIDS 2, MICHIGAN

INDIVIDUAL STUDY-CENTERS • CLASSMATE® SCHOOL FURNITURE • UNIVERSAL® SCHOOL FURNITURE • ENVOY® SCHOOL FURNITURE • BODIFORM® AUDITORIUM CHAIRS • STADIUM SEATS • CHAPEL FURNITURE • FOLDING CHAIRS AND TABLES

Send for free booklet, *The Facts about School Furniture Today*



SPOTLIGHT

meeting. The bylaws will be patterned after those of the National Council.

The board of directors for the newly-formed regional group include: Paul Farnum, N. H. State Department of Education; Felix McCormick, Teachers College of Columbia University; Ross Neagley, Temple University; and George E. Sanborn, Connecticut State Department of Education.

PTA Helps Find Housing For 35 New Teachers

GREENWICH, Conn.—Community effort, in the form of the Greenwich Council of Parent-Teacher Associations, helped find homes for 35 new teachers this summer.

When new teachers come to this town and request assistance in finding homes, they are referred to listings of available, low rent quarters drawn up and maintained by the Council's "clearinghouse."

The program started in 1957 as an experiment. Applicants are asked to fill out questionnaires stating the amount of rent they feel they can afford and the percentage of their annual incomes which it represents.

Graphology Used to Spot Emotional Disturbances

NEW YORK—Klara Roman, a Hungarian woman who came to this country in 1947, began her 10th year of teaching graphology at the New School for Social Research here this semester.

In Europe, says Dr. Roman, handwriting analysis is used to detect dangerous emotional disturbances in juveniles. Graphology is taught in all the major universities there.

In Budapest, Dr. Roman was founder and for eight years director of the School Board-sponsored Institute for the Psychology of Handwriting. Here, she teaches what she believes to be "the only college level course (in graphology) offered in this country."



Bruning's amazing new Copyflex 105 copying machine costs no more than a typewriter, saves hundreds to thousands of dollars annually in the preparation of transcripts of student records, progress reports, schedules, accounting reports, examination sheets, purchase orders and a host of other paper work,

With Copyflex 105, you type or write information only once on one original form or sheet. From the orig-

inal, you make sharp, clear Copyflex copies—in seconds—at the low cost of 1 1/4¢ each for letter size. Information can be added, changed, or blocked-out on the original, at any time, and Copyflex copies again made of the up-to-date or revised original. No typing. No proofreading.

You owe it to yourself and your school to investigate the remarkable Copyflex 105, priced at only \$295, by mailing the coupon below.

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SPOTLIGHT

A Brand New World for Johnny

AO Projection Magnifier—low-cost reading aid offers a new world of learning to children with impaired vision. Now, many can attend regular classes with their more fortunate classmates. The AO Projection Magnifier is portable...just plug in and switch on. Place

reading material-standard text books, magazines or newspapers on free-moving platform and read direct from 4½" x 12" illuminated screen. Two models available—one enlarges 3 times; the other, 5 times.



AO School Vision Screening Test—One out of five school children need professional eye care. The AO School Vision Screening Test is the best way to determine who they are. It presents the basic Massachusetts Vision Test elements fast and efficiently at the standard 20 feet and 16 inches. By simple "pass-fail" tests you can readily determine which children should be referred to an eye specialist for possible vision care. Entire unit folds into compact carrying case...can service any number of schools.



American Optical Company

INSTRUMENT DIVISION, BUFFALO 15, NEW YORK

Dept. W71—Please send full information on:
 AO Projection Magnifier
 AO School Vision Screening Test
 AO H-R-R Color Vision Test

Name _____
 Address _____
 City _____ Zone _____ State _____

Quote . . . unquote

• "Perhaps the historians of the distant future will accord to the United States as its most important contribution, not atomic fission, but the first attempt of any complex society to educate all of its people to their fullest capacities."

—JOHN H. NIEMEYER, in the September 12 issue of Saturday Review.

• "The hope of the future generations lies in the seemingly innate ability of youth to make use at a future time of those things which they have been allowed only to glimpse. The dissipation and moral deterioration of the parents of the early twenties did not, for example, deter their children from having the moral fibre and stamina to fight and win World War II, although it probably did contribute to the necessity of their having to fight it."

—EDWARD P. HOOPER, supervising sociologist, Illinois Youth Commission, at one of 11 workshops conducted by the Juvenile Delinquency Project.

• "No court, ever before to my knowledge, has suggested that the 14th Amendment is a paltry piece of class legislation limited to according protection to Negroes in the South and Jehovah's Witnesses in other areas. Surely the noble privileges therein embodied are not to be thus denigrated."

—CHIEF JUSTICE CHARLES E. CLARK, in a dissenting opinion.

• "We must make people realize that success in business and in the professions is not geared to the lack of education. It is dependent on education! Abe Lincoln was not great because he was born in a cabin—but because he was able to get out of it."

—Quoted by ELMER S. CROWLEY in the Idaho Education News.

EDUCATION ABROAD

Glasgow Firm Develops School "Atom-Smasher"

LONDON—A Glasgow firm of instrument makers has developed a new, cheap and non-lethal "atom-smasher" for use in school science laboratories.

Capable of producing nearly 500,000 volts, the model is already in use at more than 50 colleges and schools.

Educator Urges Worldwide Residential Adult Schools

TIENGEN, Germany—There should be hundreds of thousands of special live-in schools around the world to help adults go on learning, a Vermont college president told a meeting of 45 educators here.

"We need residential adult education," Royce S. Pitkin, president of Goddard College, told a conference on residential adult education,

"because it can do things for adults which other forms of education do not seem able to do."

Dr. Pitkin said a live-in adult education program for any country should include: an "idea center"; live-in schools; schools for adult educators; special schools for teachers of children and youth; schools for community leaders; and schools where people with very little income can take their holidays.

Soviet Union Marks Start Of Educational Overhaul

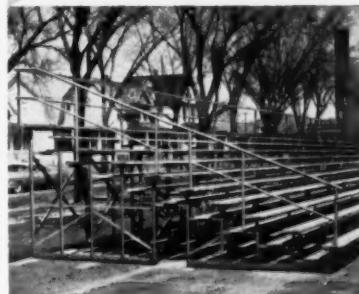
MOSCOW—The Soviet Union marks the start of a nationwide reorganization of its school system this semester.

When it was found that too many Russian youngsters were completing school with neither the proper skill nor the proper attitude for work, Premier Nikita S. Khrushchev decided to reorganize the system to insure that children were taught not

Bleachers by

PLAYTIME

Field Seating that eyes and buys for the future



AVAILABLE NOW...

"DUR-A-BILT" Bleachers

Either portable or permanent . . . with design and adaptability features that meet Tomorrow's needs—TODAY!

Outstanding Features Include:

- DESIGN . . . 24" standard depth per row assures maximum comfort... ample space for spectator passage. 8" rise from row to row affords clearer visibility — units are easily expandable for future needs.

- CONSTRUCTION . . . load-bearing members are $\frac{1}{4}$ " structural angular steel with joints electro-welded to form one-piece "Uni-Frame" panels. Foot and seat boards are select West Coast Douglas Fir, double coated to retard deterioration.

- FINISH . . . by Hot Dip GALVANIZING all steel members — after fabrication — rust is stopped at manufacturing source. This eliminates costly painting and scraping operations in the future. GALVANIZED Bleachers are available at a modest additional cost.

Contact your PLAYTIME dealer now for further information . . . or write direct for FREE literature.



SE-254

The ALL-NEW Economy Tote Tray



- LIGHTWEIGHT
- EASY TO CLEAN
- DURABLE
- NO SHARP EDGES
- AVAILABLE IN DIFFERENT SIZES
- SIMPLE INSTALLATION
- SMOOTH SURFACE
- RIDGED CONSTRUCTION

IMPACT STRENGTH NEVER BEFORE OFFERED IN A LOW PRICED TOTE TRAY!

SIZES (O.D.) IN INCHES				
No.	Length	Width	Height	Price
F-100	21	x 13	x 4 $\frac{1}{2}$	\$3.15 ea.
F-150	19 $\frac{1}{2}$	x 13 $\frac{1}{2}$	x 4 $\frac{1}{2}$	\$3.15 ea.
F-110	21	x 10	x 4 $\frac{1}{2}$	\$2.85 ea.
F-120	20	x 11 $\frac{1}{2}$	x 4 $\frac{1}{2}$	\$2.85 ea.
F-130	16	x 12	x 4	\$2.35 ea.
F-160	18	x 8 $\frac{1}{2}$	x 4	\$2.35 ea.

All prices include delivery to your city in lots of 6 or more. On lots of less than 6 add 10% F.O.B. Santa Monica, Calif.

COLORS:
Piochere Color System
STANDARD: Tan #35
Others (add 10% to price)
BLUE — #895
YELLOW — #63
PINK — #368

GENERAL PLASTICS CORP.
2050 Broadway, Santa Monica, Calif. EXbrook 3-9717

November, 1959

97

Fastest, surest way to test pupils' vision



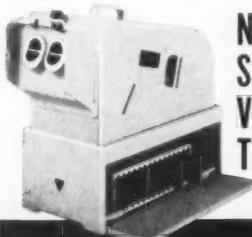
Speed your visual health program with fast, reliable measurement. N. Y. School Vision Tester identifies the 1 out of 4 who need visual care.



Compact, portable instrument needs only 2 x 2 ft. of space. Accurate tests, including Mass. Type, administered in about 1 minute—even to pre-schoolers.



Professionally approved. Thousands now in use. 30-day trial. Write for free booklet and movie, "Report Card On Vision." Bausch & Lomb Optical Co., Dept. V-23, Rochester 2, N. Y.



**New York
SCHOOL
VISION
TESTER**

BAUSCH & LOMB

SINCE 1853

SPOTLIGHT

only reading and writing but a healthy respect for work.

Children in grades one, two and three, therefore, will have 12 hours of Russian and six hours of arithmetic each week plus two or four hours of "labor teaching" and "socially useful work."

Australian Auto Association Urges Car-Driving Classes

PERTH, Australia—The Australia Automobile Association will request all state education authorities to introduce car-driving classes into their school curriculums, it was announced here recently.

The Association also decided at its annual conference that it would suggest that schools adopt road safety training courses. It is felt that road safety education should begin in kindergarten and continue through the school years.

"Continental Classroom" To be Telecast in Color

NEW YORK—The National Broadcasting Company plans to make the first color telecast of a network educational program this season.

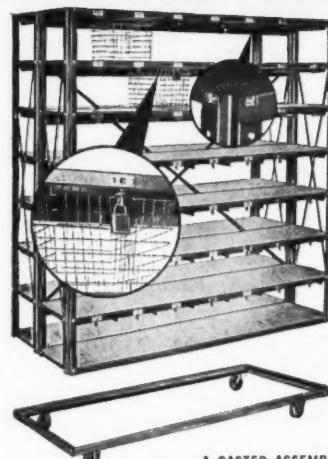
"Continental Classroom," a 2-semester televised course for college credit in modern science, will be expanded this season to include a colorcast course in modern chemistry.

In an effort to provide as many students as possible with an opportunity to see this color telecast, RCA Sales Corp. has announced a special educational price on RCA Victor TV receivers for high schools and colleges.

The chemistry course being offered on "Continental Classroom" will be televised from 6:30 to 7:00 AM local time. John F. Baxter of the University of Florida will be the teacher.

Inquiries from schools are being directed to RCA Educational TV Sales, Bldg. 211, Camden, N. J.

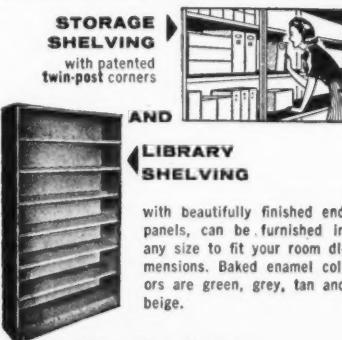
Any Size GYMNASIUM **BASKET RACKS** WITH RECESSED HASPS



A CASTER ASSEMBLY
Made to fit any single or double rack, may be added or removed at any time.

Insist on Neubauer Basket Racks for these *exclusive* features:

1. Rigid twin-post corners make the whole rack stronger,
2. Your choice of *any size* to fit odd baskeets or limited space*,
3. Easier assembly, hasps and dividers installed at the factory,
4. Recessed hasps can't snag clothing or cause injury, (Hasps omitted if desired) plus a choice of four popular baked enamel finishes, plated hardware, sturdy bracing, and other details of quality.



*No extra charge

You don't pay a premium for odd sizes when you buy Neubauer racks and shelving.

**TWIN POST
Neubauer
MANUFACTURING CO.
517 LOWRY AVENUE N.E.
MINNEAPOLIS 18, MINN.**

Journal Digest**ILLINOIS EDUCATION:**

"We must move with all possible speed to eliminate the provisional certificate in Illinois. Legislation just enacted does away with the temporary provisional certificate granted to applicants with 30 semester hours of college training. . . . In the next legislative session we should make every effort to get legislation enacted that will call for a minimum of 90 semester hours. . . ."

• • •

INDIANA TEACHER:

" . . . educators must continue pounding away at . . . the fact that the role of the school is to produce not only quality and excellence but to contribute . . . all up and down the line of human abilities and aptitudes toward economic survival of the individual, and consequently the preservation of individual self-respect and human dignity."

• • •

THE KANSAS TEACHER:

" . . . the NEA did not betray human brotherhood. (It) merely conceded that the problem of integration is resolvable, but not by resolutions. (It) accepted the responsibility . . . to use the full power of education to drive intolerance and ignorance from our shores."

• • •

WISCONSIN JOURNAL OF EDUCATION:

"We believe the WEA should give serious consideration to the feasibility of recommending the means for financing the program we propose to the legislature. If we do not express a choice of method to raise taxes before the tax bill is passed, we should not condemn the legislators for using their best judgment in deciding the method. . . ."

• • •

MICHIGAN EDUCATION JOURNAL:

"Failure to provide enabling legislation so that Michigan can participate in the National Defense Education Act would be a legislative error of the greatest magnitude. . . . If Michigan doesn't use these funds, they will be redistributed to enrich the educational programs of the states participating in the Act. . . ."

November, 1959

**ADVANCE "HYDRO-VAC" VACUUM...****Picks up anything . . . faster!**

These super-powered industrial vacs gulp chips, oil, water—all kinds of wet or dry materials—in seconds!

Here's the vac that makes light work of tough clean-up jobs. Has super-suction power. Holds 25% more because it's *square*. Ribbed square tank means extra strength, too. Has heavy-duty moisture and dust-proof motor. Comes equipped with 20" or 26" floor tools—twice as easy, twice as fast as conventional smaller tools. You need fewer strokes . . . get faster cleaning.

*Call your Advance distributor
or use the coupon for complete information.
How about right now!*

LEASE AND FINANCE PLANS AVAILABLE

ADVANCE
SPEEDBOY
DELUXE



For complete floor care, team the Hydro-Vac with an Advance floor scrubbing-and-polishing machine—another of Advance's complete line of floor care equipment designed to make cleaning easier.

**ADVANCE FLOOR MACHINE CO.**

110 Industrial Center
Spring Park, Minnesota

ADVANCE FLOOR MACHINE COMPANY

- 110 Industrial Center
Spring Park, Minnesota
- Send complete information on the "Hydro-Vac" Vacuum.
- Send literature on other Advance Floor Maintenance Equipment.

Name _____

Address _____

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**CUSTOM-LINE****Aluminum HAT and COAT RACKS**

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2. Hat shelves with staggered cast aluminum coat hooks.



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SPOTLIGHT**NYS Calls for Increase In State School Support**

NEW YORK—The New York State Educational Conference Board, in a report released by its chairman, Clyde B. Moore, professor emeritus of Cornell University, has called for an immediate increase of \$115 million in state school support, and an additional increase each year until the foundation support level has approached \$515 per pupil.

The report was based on a series of studies conducted under the direction of Paul R. Mort of Columbia University. The Board "identifies the development of a just and adequate state and local taxing system for school support as the number one issue facing school districts today."

As an alternative to property tax, the report suggests: new non-property tax power be given to school districts; other local non-property

taxes be made available to the districts; one or more non-property taxes be imposed, collected and returned to the districts; or the proportion of the foundation level now met by property taxes be reduced.

"On the basis of our studies," said Chairman Moore, "it appears that of the non-property taxes, the one best adaptable to school districts would be a percentage of the state's graduated income tax to be paid by the taxpayer to the state for return to the school district of residence."

The Board also recommends that legislative provision be made for computing on a current basis the state aid for districts experiencing more than average growth, and that the legislature make possible a study of the governmental arrangement of school districts and give attention to modifying the laws governing district meetings.

The New York State Educational Conference Board is composed of 18 members of nine professional organizations in New York State.

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New Jersey Superintendent Urges New School Taxes

ATLANTIC CITY—The head of the New Jersey School Superintendents Association expressed the hope recently that "New Jersey will not be the last state in the nation to adopt the broader tax base—sales or income—on which a fairer system of school support can be built."

Speaking at the association's 14th annual conference, S. N. Ewan, Jr., superintendent of schools in Westfield, urged "that New Jersey take steps soon to provide for financing education with something better and more secure than the tax structure on which the state government now depends."

To help finance their schools, New York and New Jersey depend on almost twice as much property taxes as the average use of this tax in the country. New Jersey ranks first in the nation in use of the tax with Massachusetts second.

School Sites Range From One to 350 Acres in NYS

ALBANY—School sites in New York State range in size from less than one acre to 350 acres. Average size is 10 acres, or one acre for each 50 pupils. Average playground space is about five acres, or one acre for each 100 pupils.

These figures were compiled for the school year 1958-59 by the New York State Education Department's division of research and are reported in the "Departmental Fact Sheet," Number 13, 1958-59 series. The report does not include New York City.

Although it seems reasonable to assume that schools which house the smaller number of grades would have the smaller sites, the data did not bear this out. Central high schools have an average of 19.46 acres per building, whereas central schools (K-12) have an average of 13.65 acres per building.



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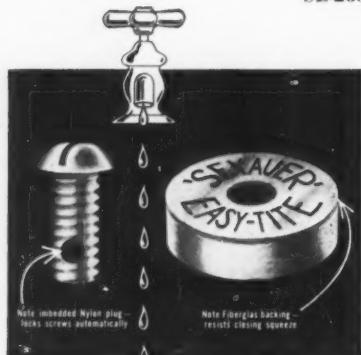
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SPOTLIGHT

Russian Education Minister Denies Anti-Jewish Bias

THE SOVIET UNION'S Minister of Higher and Secondary Education, during his recent visit to the United States, denied reports that Moscow discriminates against Jews.

Vyacheslav P. Yelutin was a member of Khrushchev's party during the Premier's tour of the U.S. The educator made his denial to a *N.Y. Times* reporter during an automobile ride from Washington, D.C. to Baltimore.

Mr. Yelutin pointed out that Jews constitute 10 percent of the students in Soviet institutions of higher education although they represent only two percent of the total Soviet population.

Trained as a metallurgist, Mr. Yelutin is a graduate of the Steel Institute in Moscow. He became Deputy Minister of Higher Education in 1951 and Minister in 1954.

NOVEMBER

3-5, Natl. Assn. of Public School Adult Educators. At Buffalo, N.Y. Ex. Sec: Robert A. Luke, 1201 16th St. NW, Washington 6, D.C.

5-8, Adult Education Assn. At Buffalo, N.Y. Ex. Sec: Glenn Jensen, 743 N. Wabash Ave., Chicago 11, Ill.

8-14, American Education Week. Theme: Praise and Appraise Your Schools.

12-13, National Organization on Legal Problems of Education. At Cleveland, Ohio. Ex. Sec: Roger M. Shaw, Kent State University, Kent, Ohio.

16-20, International Automation Congress and Exposition. At New York City. Man. Dir: Richard Rimbach, 845 Ridge Ave., Pittsburgh 12, Pa.

25-28, National Council for the Social Studies. At Kansas City, Mo. Ex. Sec: Merrill F. Hartshorn, 1201 16 St. NW, Washington, D.C.

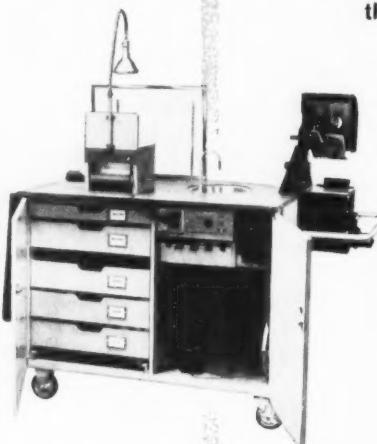
DECEMBER

7-11, American Vocational Assn. At Chicago, Ill. Ex. Sec: M. D. Mobley, 1010 Vermont Ave. NW, Washington, D.C.

SE-264

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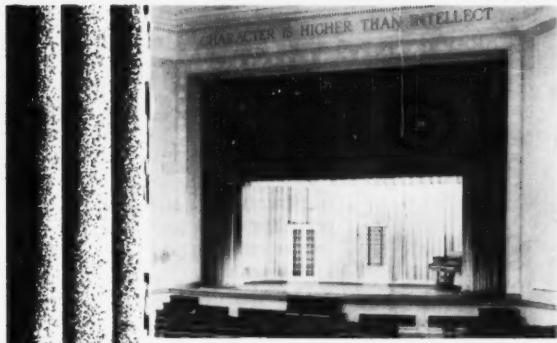
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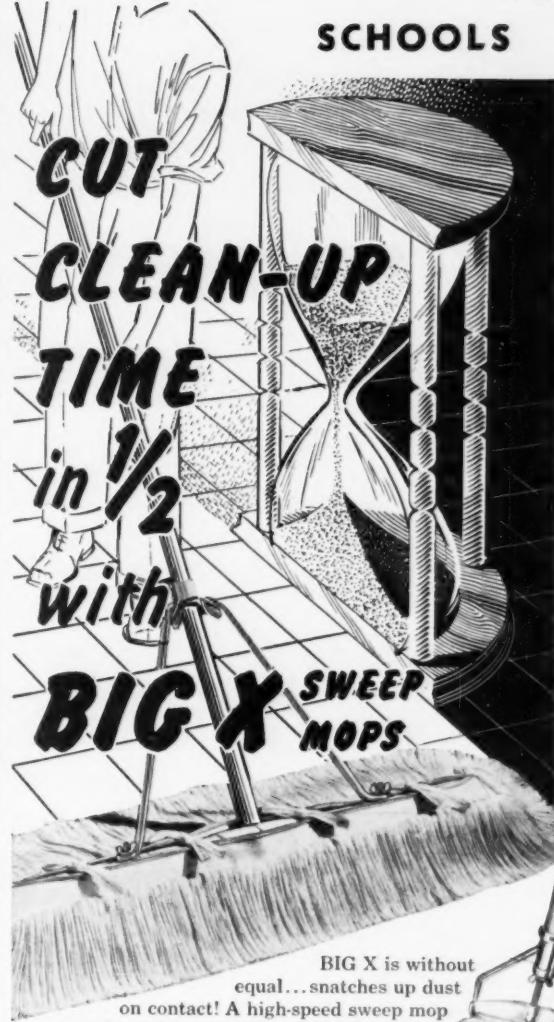
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Portable electric hot and cold food cart is easily wheeled into a school kitchen. Extra food storage space is visible on top of the cart.



The Contemporary Centralized Kitchen

by RUTH MILLIKIN

SINCE MORE THAN 65,000 public schools in the United States serve a hot lunch daily to more than 14 million children, there is always widespread interest in modern methods of getting this job done as efficiently and economically as possible.

In the Costa Mesa Union School District in Southern California we have been operating a centralized kitchen for elementary pupils since February, 1958, and the amount of visitors who have come here to inspect our operations and facilities

indicates the mounting interest in centralized kitchens.

It is our experience that centralized kitchen operations and supporting activities result in optimum use of labor, greater economy in over-all efficiency, and more satisfactory control of our mass feeding job. And since we operate a central warehouse, better food control is achieved through better planning and purchasing.

Planning is a most important function, from inception of the idea of operating a centralized kitchen to every-day looking ahead for "better buys" in foodstuffs, since close coordination between central kitchen and sub-kitchens in outlying schools must always be maintained.

Our own planning for a central kitchen began when we started cooking at the Rea School for two additional schools in our district. The consulting architects pointed out to us that even preliminary planning involved not only the central kitchen and warehouse facilities but also sub-kitchens in outlying schools as well, since the sub-kitchens should coordinate effectively with the central kitchen in all respects.

Portable electric hot and cold food carts have solved the problem of transporting and serving all foods at the right temperatures. These carts aid sanitation, cut down the bacteria count and deliver foods, hot or cold as required, with all its original freshness, firmness, taste and nour-

Mrs. Millikin is director of Food Service in the Costa Mesa, California Union School District.



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SCHOOL LUNCH

ishment. Temperatures in the hot food compartments of the carts are always above the required 150°. Salads and other cold foods are taken right from the refrigerator of the central kitchen and loaded into the cold compartment of the cart.

Foods are loaded into the carts in the central kitchen; the carts then are wheeled into a truck and transported to sub-kitchens throughout the district. Upon arrival at sub-kitchens, the carts are moved into the cafeteria serving line and plugged into electrical outlets. Thus the carts become an integral part of the serving line.

Under our centralized kitchen system, one administrator supervises the entire operation and purchases for seven schools, one cook cooks for seven schools, one baker bakes for seven schools, one salad maker makes

salads for seven schools, and one utility man-driver handles deliveries and pick-up of the hot and cold food carts to and from the sub-kitchens. This type of operation therefore represents big savings in labor and in capital outlay for equipment.

Apparently centralized food service in schools became more or less unpopular a number of years ago, chiefly because it was difficult at that time to maintain foods at proper temperatures during transportation from the central kitchen to outlying schools in some areas. Foods lost some of their appetizing and nutritious qualities because of this. However, this deficiency has been corrected through the development of modern, efficient portable electric hot and cold food carts.

Now, with a well planned centralized food system and modern, dependable equipment, school systems have available a most satisfactory and desirable method of doing a big job and doing it well.

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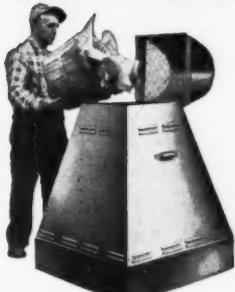
* U.S. Pat. No.: 2,835,546

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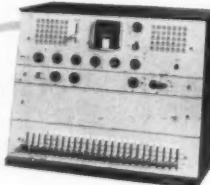
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LEARNING TO WORK IN GROUPS

By Matthew Miles. New York: Bureau of Publications, Teachers College, Columbia University. 1959. 285 pp. \$5.

The book represents a systematic approach to the problem of leadership development. The discussion is limited to training leaders for small-group situations. The author discusses critically such factors as effective group behavior, the training process, planning for training, designing training activities and the evaluation of such activities. He illustrates many ideas from experience and includes a fine bibliography.

While Dr. Miles is deeply concerned with leadership in groups, he does not bow uncritically in worship of the "group process." His keen analysis is specially useful to those concerned with developing educational leadership. It will be of great help also to those in industry, government or civic life who are interested in making small-group endeavors more effective.

—JACK CULBERTSON
Assistant Professor of Education
University of Oregon
Eugene

THE AMERICAN SECONDARY SCHOOL IN ACTION

By Philip W. Perdew. Boston: Allyn and Bacon, Inc. 1959. 351 pp. \$5.50.

This book encourages careful reflection about the principles of secondary education and adolescent development. By drawing on reports of college students, acting as observers and student teachers in classes, the author has given us a book well suited as a text for a first course in secondary education. Teachers in service will also find it useful. There are few books available in which discussion of generalizations are based on practical situations.

Emphasis on the working situation

gives the book easy readability and a high interest level. Adequate attention is paid to the practical problems of classroom management, guidance, learning, planning for instruction, and grading and reporting practices. While the best modern practices, actually in use, are stressed, frequent notice is given to current trends in secondary schools.

—C. GLEN HAAS
Professor of Education
University of Florida
Gainesville

EDUCATING THE GIFTED

Edited by Joseph L. French. New York: Henry Holt and Co. 1959. 555 pp. \$5.50

The current emphasis upon the necessity to better educate our gifted students has brought forth a book of readings edited by Dr. French. The volume consists of articles from professional journals written by pioneers and leaders in the field. They present varying points of view relative to education for the gifted. The reader has access to recent data and research to develop a working philosophy for improving programs in this area. Each section contains a commentary by the editor to present continuity and perspective.

This text is a valuable reference source for all teachers who must sooner or later come to grips with this important educational issue.

—LAWRENCE O. HAABY
Professor of Education
The University of Tennessee
Knoxville

A HISTORY OF EDUCATION: A Social Interpretation

By James Mulhern. Second Edition. New York: Ronald Press Co. 1959. 754 pp. \$7.50.

A highly regarded educational historian, Mulhern has produced an almost encyclopedic work in the second edition of his *History of Education*

tion. Unlike most popular texts, he gives more than passing attention to the Orient and to primitive societies. The breadth of his coverage makes the book very valuable as a reference for anyone interested in education. Not only is it broad in its coverage, but it sets the educational institutions of each culture and period within the context of other institutions, revealing how the education was a product of the forces of its time and place.

—ROBERT E. POTTER
College of Education
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Gainesville

THE CHALLENGE OF SCIENCE EDUCATION

Edited by Joseph S. Roucek. New York: The Philosophical Library. 1959. 491 pp. \$10.

Joseph S. Roucek, in collaboration with 30 distinguished writers, has drawn together the patterns of thinking surrounding the professional educator in the erupting age of Sputnik. They consider the educational practices in the field of science education with its present and future needs, specific weaknesses in teacher training, latest developments in major subject areas (mathematics, physics, biology, chemistry and zoology) and finally the comparative aspects of our system with others.

The "College and University" division contains engineering enrollments and projected figures from the report prepared for the Committee on Development of Engineering Faculties of the American Society for Engineering Education. This is an important source of information for the school planner.

The list of contributors includes Dr. James R. Killian, consultant to President Eisenhower and Dr. Werner Heisenberg, Nobel Prize Winner.

As a source of general information for the serious reader and the specialist, this collection presents the sociological, religious and political implications of science education from the pre-primary through the college and university levels.

—BRUCE MILLER
Superintendent of Schools
Riverside, California

**u
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**CONTROL
YOUR OPERATING COST**



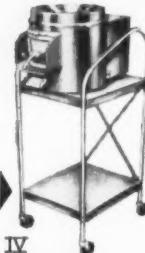
Portable Model H \$135

Special design for schools—
rugged and reliable

- 10% waste.
- 15 lbs. per minute.
- Peeling disc unconditionally guaranteed for 2 years.
- Stainless steel construction.
- Drainboard type.

Model H200 — \$170

Mobile Peeler
No lifting, rolls easily.



UNIVERSAL INDUSTRIES

DEPT. J, 87 FELLSWAY WEST, SOMERVILLE 45, MASS.
Manufacturer of the Univex Food Preparation Machines

Canadian Distributor:
Crown Electrical Mfg., Ltd., Brantford, Ontario

SE-281

**More Bounce Per Ounce
Off Maple Floor—**



Andrew Hill H. S. Gym

San Jose, Calif.—Installer, Best Floor Co.—Architect, Edward W. Kress

"LESS DENTS" MAKE SENSE FOR YOU, TOO!

Livelier, easier-on-the-feet, the floor of this new high school gym in California is the same as in the Big Ten's latest "gem" (Columbus, Ohio) — just smaller.

Made by J. W. Wells and DIAMOND HARD Northern Maple, it's a floor which can also take roller skating, dancing, other community uses that help "sell" the gym — or (if necessary) pay for it.

Write for "Money-Making Gyms"
(and leads from Wells' ads in school publications)

DISTRIBUTORS IN MAJOR CITIES COAST-TO-COAST



NORTHERN MAPLE

J. W. WELLS
LUMBER COMPANY

Menominee, Michigan
Phone: UNION 3-9281
Member, Maple Flooring
Mfrs. Assn.

110

SE-280

SE-282

Scoremaster

SCORES HIGHEST WITH SPECTATORS

MIN. 5 4 3 SEC.

3 2 1 2 3 4 4 7

VISITORS HOME

Model 250-6, Electric Basketball Board

72" x 34" x 6" Overall; 5" Letters; 6 1/2" x 10" Numbergrams

More and more school Administrators and Coaches are turning to Scoremaster Scoreboards because, after careful investigation and consideration, they have found that they are highly dependable, easily installed, require a minimum of maintenance and—dollar for dollar—cost less than comparable boards. And players and spectators like them, too.

Write today for literature, specifications and prices.

Designing custom-made boards to meet specific requirements for any sport is also one of our specialties.

THE M. D. BROWN CO.
2207 Lake St. Niles, Mich.

"When Split-Seconds Count—Count on Scoremaster"

SE-283



Wheelock SIGNALS

The "know-how" name in fire alarm systems

Wheelock Signals' know-how in designing and producing complete fire alarm systems has been expanding and maturing for 40 years.

Technical competence, refined and re-enforced by extensive experience, is made available to aid you in providing adequate protection to structures of any size, now on the drawing board or in use for any period of time — office buildings, school buildings, industrial facilities, hospitals and sanatoriums.

Write for descriptive bulletin FA-3 and the address of your local sales representative.

Wheelock SIGNALS

LONG BRANCH, N.J.

THE SCHOOL EXECUTIVE

TWO NEW SOUPS

In Two Can Sizes



Campbell Soup Company has begun the introduction nationally of two new soups—Old-fashioned Tomato Rice Soup and Cream of Vegetable Soup. Both products will be available in the ready-to-serve (individual) size and the 50-ounce (condensed) size. Simultaneously, Campbell's is introducing Vegetarian Vegetable Soup in the ready-to-serve individual size, formerly available only in the company's 50-ounce line.

With the introduction of Old-fashioned Tomato Rice and Cream of Vegetable, Campbell will have a product line of twenty 50-ounce size soups. Currently available are Beef Noodle, Tomato, Cream of Mushroom, Cream of Chicken, Bean with Bacon, Cream of Celery, Chicken Gumbo, Chicken Noodle, Chicken with Rice, Chicken Vegetable, Clam Chowder, Consomme, Green Pea, Minestrone, Turkey Noodle, Vegetable, Vegetable Beef and Vegetarian Vegetable.

To serve these soups an operator merely adds an equal quantity of water and heats. A Campbell spokesman has estimated that the average cost to operators for a six-ounce serving is about 4.6 cents.

CAMPBELL SOUP CO., INSTITUTIONAL DIV., Camden 1, N. J.

1½" STUD

SE-302

Finished Partitions Weigh Less

A 1½" Trussteel Stud, which provides a finished partition thickness of 3½" when lathed and plastered, has been perfected by United States Gypsum Co. The 1½" stud has a maximum width of 1½" at the web protrusions on either side of the flanges. It has the same design as other sizes of open Trussteel Studs used in hollow, non-load-bearing, and fire-resistant partitions.

A 1½" Trussteel Stud lath and plas-

ter partition finished to 3½" is actually the same thickness as unplastered 4" concrete blocks. Weight per square foot of partition built with the 1½" Trussteel Stud, however, is much less. Depending on the plaster aggregate and whether metal lath or Rocklath plaster base is used, the weight varies from 13 to 17 pounds. Concrete blocks weigh from 19 to 25 pounds per square foot—about one-third heavier. Lighter partitions mean lighter footings and structural members, and a consequent saving in cost of materials.

Sound transmission is generally less through Trussteel Stud Systems than through more rigid, porous block walls. The stud design permits utilities to be installed easily without impairing the strength or other properties of the partition. Decorating is also done with ease because of the smooth, monolithic finished surface.

The system can provide a fire rating of 1½ hours.

U. S. GYPSUM CO., 300 W. Adams St., Chicago 6, Ill.

CLOSED CIRCUIT TV LINE

SE-303
Cameras and Monitors Available



Motorola, Inc., has introduced a line of five closed circuit television cameras and two monitors for educational use. Two cameras have but one operating control, an on-off switch, making possible operation by non-technical personnel.

The basic Motorola general purpose camera, available in four versions, is a high quality, highly sensitive stable instrument, providing 550-600 lines horizontal resolution. Weighing 12 pounds and measuring 5½ x 7 x 11 inches, the camera puts out a one volt video signal into a 75 ohm coaxial cable. The camera uses a standard 16 mm C lens mount and can accommodate a remote control four lens turret. Such remotely controlled functions as pan and tilt, iris control, focus, and zoom lens can also

be added to the camera. The four versions of this unit provide: 1) either automatic light compensation, or, manually controlled compensation; 2) either random interlace, or, locked interlace. The automatic models adjust by themselves for variations as much as 200 to one in light levels at the televised scene. This eliminates the need to make camera adjustments as lighting conditions change. On the automatic cameras, an on-off switch is the only operating control.

The fifth camera in the Motorola line is a viewfinder, very high quality unit for studio work in elaborate educational or industrial training television systems. It provides a rear controlled four lens turret, side focusing, independent viewfinder control and 600 line horizontal resolution. The camera is used with a portable control unit.

The Motorola educational monitor, called the Classroom 21 (illustrated), is a 21 inch receiver, capable of switching from a closed circuit, video signal to off-the-air pickup of standard VHF or UHF broadcast signals by turning a single control on the back of the set. The unit has a front mounted loud speaker and can be used as an audio amplifier. The set provides a high definition 500 line picture extremely valuable in reproduction of slides and laboratory experiments. The equipment has input and output video and audio jacks so that several receivers can be looped on a single coaxial cable. There is also a 14 inch general purpose monitor.

MOTOROLA, INC., 4501 W. Augusta Blvd., Chicago 51, Ill.

WATER COOLER

SE-304

Mounts on Wall

The Wall-Mount is the name of a new Halsey Taylor cooler, which is mounted directly on the wall, off the floor. It has no outside plumbing connections, there are no dirt-traps behind the cooler, and cleaning and maintenance present no problem since the cooler does not sit on the floor.

The stainless steel top is contoured for easy cleaning and the Wall Face Splash is designed as an integral part of the top. The Wall-Mount is available in three sizes: 6, 11 and 16 gallon.

THE HALSEY W. TAYLOR CO., Warren, Ohio.

SECTIONAL PAN LINE**SE-305****In 5 New Sizes**

Standard two-thirds size stainless steel sectional pans, measuring $13\frac{1}{8} \times 12\frac{3}{4}$, are now available in 2", 4" and 6" depths. A standard one-ninth size, measuring $6\frac{1}{8} \times 4\frac{1}{4}$, is available in 4" depth and a square, all-purpose sandwich pan, measures 6" by 6" by 3" deep. These pans can each be furnished with flat, nesting-type covers for perfect food protection and easy stacking.

Like all other Bloomfield pans, these new units are made only of finest quality

18-8 stainless steel. They have precision tapered sides, absolutely free from ripples and unevenness. Corners have full thickness of metal and are perfectly rounded. All edges are smoothly ground and surfaces are flawlessly finished.

BLOOMFIELD INDUSTRIES, INC., Dept. DTE, 4546 W. 47th St., Chicago 32, Ill.

DISHWASHING RACKS**SE-306****Are Lightweight, Rugged**

Fabricated of a heat resisting plastic,



the new Miracle-Lite dishwashing rack weighs a mere 21 ounces as compared to the prevailing metal racks which weigh up to 133 ounces. Miracle-Lite's extreme lightweight is easier and more comfortable to handle. Rugged but flexibly constructed, it cannot tear, bend out of shape or break. The very pliancy of the special plastic used means a decidedly marked decrease in the noise decibel department.

Miracle-Lite stacks perfectly, can be used efficiently by all $19\frac{3}{4} \times 19\frac{3}{4}$ machines of all makes, will not mar, scratch or dent metal and composition surfaces, and does not conduct heat.

STER-WOOD CORP., Brooklyn, N. Y.

NEW TOLCO FOUR STUDENT BENCH



**ASK ABOUT THESE OTHER
NEW TOLERTON PRODUCTS**



ARC WELDING BENCH
"MODEL TAW-3668"
With 20 gauge steel "see-thru" welding shield to eliminate eye flashburn while students observe demonstration.



MOLDING BENCH
"MODEL TMB"
Sand storage area completely lined with heavy-gauge, hot-dipped galvanized steel. Back panel and top shelf used to store tools. Removable maple shaker bars.

Gives 50% more horizontal project storage space

The "built-to-take-it" heavy-gauge steel TM-12 FA provides 12 individual lockers, 6 each side. Each locker is numbered 1 to 6, and fitted with ballpoint fasteners and mating pulls, and lugs for padlocks.

Telco tops are built to take it, too. Laminated of 100% Northern hard maple, an exclusive steel spline, and $\frac{3}{8}$ " through bolts, they'll never bow or sag. Want more information? Write, wire or phone.

Established 1894
THE TOLERTON COMPANY
265 North Freedom Avenue • Alliance, Ohio

"SELLING TO SCHOOLS THROUGH TOP RATED DISTRIBUTORS"

CHANGEABLE LETTER BULLETIN BOARDS

Letters Provide High Contrast



Albert W. Pendergast Safety Equipment Co. announces a new line of Changeable Letter Bulletin Boards.

The boards are attractive in appearance and have a hardwood frame with specially processed grooved black felt background.

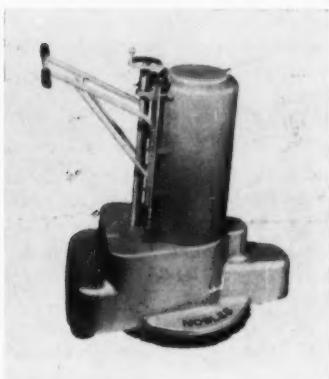
Letters are Roman art style in white plastic, providing striking contrast and easy readability. Easy to insert, the message can be changed in a matter of minutes.

The board illustrated is the No. 125-size $9\frac{1}{4} \times 13\frac{1}{2}$ ", which comes complete with 200 letters and numbers.

ALBERT W. PENDERGAST SAFETY EQUIPMENT CO., Tulip and Longshore Sts., Philadelphia 35, Pa.

FLOOR SCRUBBER

SE-308

Brush Conforms to Irregular Surfaces

The SpeedScrub Floor Scrubber has a multi-sectioned brush that is designed to conform to surface irregularities automatically, scrubbing out shallow spots and over bumps as well. The brush itself has an all-metal back with its bristles woven on to it by wire, thus eliminating troublesome nails or staples ordinarily used to affix bristles to brushes with wooden backs. The bristles are purposely longer at outer edges so that when extra pressure is exerted upon the brush, all bristles maintain contact with the floor.

Brush and motor as one unit are mounted on "A" frame that is raised or lowered by 3 screw-jacks with one central control. This gives you variable brush pressure control to either scrub or strip surfaces such as composition tile, ceramic tile, wood, or cement. Brush will raise $1\frac{1}{2}$ " to clear door jambs, and will extend 4" under kick boards. Skirt height is 3".

SpeedScrub's motor is electrically reversible, thus lengthening brush life. Water flow is adjustable by valve. Scrubbing water is directed to the center of brush so that inside edges of brush sweep water under total bristle area. Water flow can be regulated according to job being done. This feature ends problem encountered in some machines where water sometimes is spun off the top of brush.

The tank has a capacity of 10 gallons and it is epoxy-lined. All rubber hoses and connections have been eliminated from SpeedScrub. Brush removes with one twist of center locking device. The motor and brush are one integral unit which eliminates need for a clutch unit.

NOBLES ENGINEERING AND MANUFACTURING CO., 645 E. Seventh St., Saint Paul 6, Minn.

November, 1959

**SCHOOL TRAFFIC SIGNAL SYSTEM
For Mid-Block Crossings**

SE-309

Crouse-Hinds has introduced a new School Traffic Signal System, known as Type PA-30. It is designed for operation at mid-block crossings. These locations are safer places for children to cross streets, as they do not have to avoid turning traffic.

During the morning and afternoon, the signal operates automatically in response to push buttons. At other periods, the signal remains on normal highway

"Go" indication. On non-school days, the signal remains on highway "Go" indication at all times. When school re-opens, operation resumes automatically in accordance with the previously set schedule.

An electronic controller, exclusive with the Crouse-Hinds PA-30 School Traffic Signal System, provides simple timing adjustments. Control knobs are easily turned to desired settings; no changing of gears or setting of dial keys is required.

CROUSE-HINDS CO., Syracuse 1, N. Y.

SE-285

**More
QUALITY
More
SERVICE
More
VALUE
with ...**



Stack, move, store on dolly

Durham Stack Chair gives you seating economy. Vinyl laminated steel seat and back, bronze frames and russet vinyl; or beige finish all steel style. Big 14" x 14" seat. Standard dining height.



Durham
THE FINEST METAL FURNITURE



No. 251



No. 305J



No. 875TA



No. 875

Complete line of children's chairs. No. 251 tubular steel ladder back with padded upholstered seat and No. 305J all steel channel frame are two leading values.

Write for
Catalog Today!



DURHAM MANUFACTURING CORP., MUNCIE, IND.

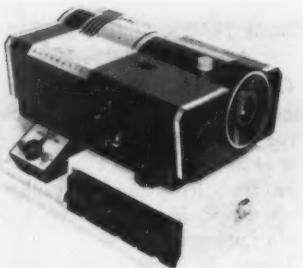
Wrap rack is exclusive extra feature of Durham tablet armchair. 24" x 12" writing surface. 5-ply hardwood core arm has Northern Maple back, melamine laminate surface.

Strongest tubular steel frame chair on market. Clean, modern lines. Similar styles with wood, vinyl laminate, or padded upholstered seats; wire, padded, or upholstered backs.

AUTOMATIC SLIDE PROJECTOR SE-310

Features Remote Control, Interval Timing

A remotely controlled interval timer, brilliant 500-watt lamp using a new proximity-reflector principle, variable intervals and "hold," "advance" and "reject" controls make a new Realist projector ideal for classroom use. The Realist "990" Automatic Projector may be operated from as far away as 12 feet, enabling a teacher to sit among his students during the visual-aid portion of his lecture.



Intervals of from five to 60 seconds may be selected with the timer, and the intervals can be changed even while the

SE-286



The sign of safety

The Image of CF&I—a giant steelman—provides positive protection for buildings and property with a Realock Chain-link Fence. This strong, yet attractive, fence guards playing children against stray animals and traffic . . . insures schools, playgrounds and other sites against acts of vandalism, arson and burglary.

Heavily galvanized after weaving, the tough metal fabric of a Realock Fence is weather-resistant. Virtually rust-proof, it gives many years of maintenance-free service. Another

feature is the sturdy posts which are set in concrete.

Realock Fence is available in a selection of types—with or without barbed wire tops, in heavy steel or lightweight aluminum construction. Realock Fence is also ideal for baseball backstops, tennis courts and athletic fields where it is desirable to separate participants from onlookers.

A nearby Realock representative will be glad to give you a free estimate at no obligation. He's listed in the classified telephone directory, so call him today.

THE COLORADO FUEL AND IRON CORPORATION—Denver and Oakland
WICKWIRE SPENCER STEEL DIVISION—Buffalo, New York



REALOCK FENCE
THE COLORADO FUEL AND IRON CORPORATION
BRANCHES IN ALL KEY CITIES

6927

projector is in operation. A feature of the remote control is that any slide may be held or rejected at will.

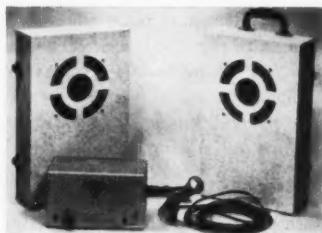
The projector is offered in two models, both of them featuring a three-element, f:3.5, four-inch objective lens which, combined with the 500-watt lamp, allows 1000 light lumens on the screen. Both models feature preheating and convection cooling of slides, to keep them from "popping" in and out of focus, and Realomatic 45-slide trays, which allow more slides to be shown with fewer intermissions for changing trays.

A two-tone speckled-finish carrying case, for use with both projectors, holds three extra slide trays and the timer and serves as a steady base for the projector while in use. Extra Realomatic slide trays may be indexed to hold an entire slide library.

REALIST, INC., 2051 N. 19th St., Milwaukee 5, Wis.

PUBLIC ADDRESS SYSTEM SE-311

Adjusts Automatically for Every Voice

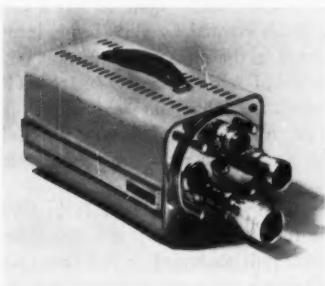


The new Limpander "Soft Sound" Public Address System is fool proof and portable to the extent that it can be installed and adjusted for use in a few minutes by any teacher or student. This portable public address system is designed for everyday classroom use by the non-professional user. Never too harsh—never too faint—it adjusts automatically for every voice.

Mike Range is non-critical. The speaker may talk directly into the mike or back off several feet with very little difference in the output level. The public address system is practical for classes of 25 to 350 students. It covers all conferences, lectures or group meetings, of any and all sizes. This portable P.A. system consists of two eight-inch high-quality speakers, one mike and the Limpander one-tenth watt Soft Sound amplifier. The complete system weighs less than 30 pounds.

ELECTRONIC SYSTEMS ENGINEERING Co., 903 Cravens Building, Oklahoma City, Okla.

DIRECT-WIRE TV SYSTEM SE-312
With Vidicon-Type Camera



This vidicon-type camera is the heart of a new, direct-wire television system introduced by Argus Cameras, a division of Sylvania Electric Products Inc.

The camera is designed to bring closed-circuit TV within the financial limits of school systems and universities where price has been a deterring factor to widespread use of the medium.

Exclusive of lens, the camera measures 12 inches long, 7 inches wide, and six inches high. It weighs approximately 16 pounds. Because its controls are self-contained, it may be wired directly to any standard television receiver to which it will transmit an image on any channel from two to six.

SYLVANIA ELECTRIC PRODUCTS, INC.,
730 Third Ave., New York 17, N. Y.

BUILT-IN ELECTRIC OVEN SE-313
With Integral Exhaust Blower System

A new built-in electric oven with an integral exhaust blower system has just been announced by Thermador Electrical Manufacturing Co. With this new Thermador oven, the builder has the advantage of needing only one installation and one wiring hook-up, instead of two separate installations and wirings required when using presently available separate hoods. The WO18ARH series Exhaust Oven fits into a standard 24" wide cabinet and has the same generous 18" x 18" x 19 1/8" oven interior as all other Thermador Bilt-in Ovens.

The motor switch is located on the front trim frame, just above the lower edge of the hood, where it is readily accessible yet concealed from view. This switch controls the exhaust blower motor except when broiling. The blower motor is turned on when the thermostat knob is turned to broil so that the exhaust system automatically operates when broiling or rotisserieing.

The hood covers and conceals the filter. The filter material is stranded aluminum, compacted to form a semi-

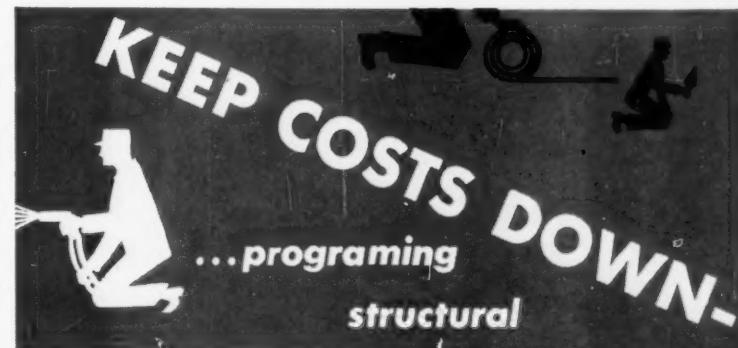
rigid sheet. It is framed with aluminum channels and can be easily removed for cleaning. To remove the filter, it is simply lifted out from underneath the hood. Nothing else need be dismantled, and no tools are required.

The blower housing and motor are easily removed without tools. For this purpose the hood is secured with concealed but readily accessible thumb nuts. When the hood and filter are both removed, the entire blower assembly is accessible and can be taken out by removing one wing nut.

The air discharge is through the back of the blower housing. A collar is provided for connecting to standard 4" diameter conductor pipe. For horizontal discharge through the wall behind the oven, only a straight length of conductor pipe is required. For exhausting vertically upward, a 4" conductor pipe elbow must be used. Conductor pipe, elbows, roof caps, wall caps, etc., will not be furnished by Thermador.

Thermador Electrical Manufacturing Co., 5119 District Boulevard, Los Angeles 22, Calif.

SE-287



A preventive maintenance program for your school will... catch trouble before it becomes expensive... provide a budgeted program to eliminate sudden large expenditures... permit efficient use of labor by programing. The Tremco Man can show you how to adopt this program. His trained inspection, diagnosis and recommendation plus application instruction of the job, assure economy and satisfaction... whether the work is done by a contractor or your own maintenance crew.

Get your free copy of Tremco's Revised School Building Maintenance Program... ask your Tremco Man or write us.

"You can't buy experience by the gallon", the TREMCO MAN brings it to every job...

Call him and ask for a demonstration of his "know-how".



THE TREMCO MANUFACTURING COMPANY, Cleveland 4, Ohio

TREMCO

PRODUCTS AND TECHNICAL SERVICES FOR
BUILDING MAINTENANCE & CONSTRUCTION

ROOFS
FLOORS
PAINTING
WATER REPELLENTS
SASH

TRAFFIC MARKING
In Plastic

SE-314



An extruded vinyl strip for traffic marking is being produced by Auburn Plastics, Inc. Used for highway center and border lines, street intersections, railroad crossings, crosswalk marking,

and school zones, the plastic material is a lasting replacement for the quickly fading painted lines now in use. It is said to be the most economical long term method of road marking.

The reflectorized vinyl material is furnished with an adhesive backing. During installation, additional adhesive is applied to the area to be marked. After the adhesive becomes tacky, the vinyl strip is laid in place and pressed down permanently. The material is easily cut to length and is edge tapered to prevent scuffing. The vinyl material can be produced in many colors; how-

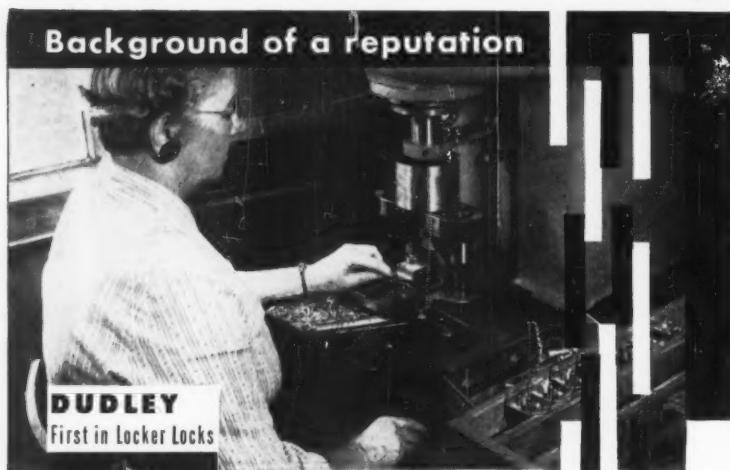
ever, black, red, yellow and white will be standard.

The self-cleaning material has a pebbled finish created by glass beads incorporated in the material, to furnish both a non-skid and a reflecting surface. The plastic material retains color and is resistant to oil, snow melting materials such as calcium chloride, grease, acid, water, snow and ice.

The vinyl strip is available in three widths, 3", 4", and 6" and two thicknesses. It is packaged in 150 foot rolls.

AUBURN PLASTICS, INC., Auburn, N. Y.

SE-288



DUDLEY
First in Locker Locks



Master-Keyed
Built-in Lock

Fits all locker piercings.
Quick combination
change with special re-
set key.



P-570

Master-Keyed
Combination Padlock

Finest of all master-keyed padlocks. Cast aluminum case, extra heavy steel shackle. Self-locking. Rotating dial.



The DUDLEY
Master Key

Can't be duplicated on
ordinary key making
machines.

The standard of controlled locker protection since 1921

Permanent Merger

A unique Dudley feature is the special reset key which permits quick change of combination without removing part of the lock. Here an operator is assembling the key plug spring which provides the key locking unit and resetting feature. The press ingeniously compresses the assembled elements allowing just the right freedom for movement. It is one of the especially designed operations that make Dudley Locker Locks so easy in operation and reliable for a lifetime.

You can always depend on the protection given by Dudley Locks, and the security of the Dudley Master Key. Ask your Dudley representative. He will helpfully discuss your locker lock needs—without obligation, of course.

DUDLEY
LOCK CORPORATION

Dept. 1119, Crystal Lake, Illinois

21-INCH POWER MOWER SE-315

Features New Spring Starter



A new push-button, spring-action starter, the Spinstart, has been added to Toro's 21-inch self-propelled Whirlwind rotary, the power mower with Wind Tunnel design. Spinstart fits on top of the motor and does away entirely with the conventional rope-pulling method of cranking. Instead, two or three turns of the spring, a press of the button to release it, and the spring furnishes the fast spin that puts the motor in operation.

The Whirlwind with Spinstart is a self-propelled rotary with a Wind Tunnel design that permits the operator not only to cut and trim the lawn, but also simultaneously—through its vacuuming action—to swoop up cuttings, dead leaves, cigarette ends and other lawn debris, including crabgrass seeds.

The engine is fitted with a mechanical type governor that is very sensitive to power requirements and delivers additional power when it is needed for heavy cutting. An oil pump gives constant lubrication.

The Toro Whirlwind, therefore, has three-season utility: lawn cleaning in the spring, summer mowing, and leaf-bagging or mulching in the fall.

TORO MANUFACTURING CORP., Minneapolis 6, Minn.

FLAG STAND

SE-316

Is Equipped with Spotlight

A new flag display stand designed for use in classrooms, meeting halls and auditoriums is announced by D. C. Turner, Inc. Named the Minute-Man Power-light Flag Display Stand, it combines a handsome flag staff, jet-stream blower and bright spotlight in a single, compact unit to permit instant, illuminated display of the flag for all occasions, functions and ceremonies.

Of sturdy, welded tubular steel, finished in lustrous black enamel, the 7' tall stand includes a large, 2'x3' silk flag in the official 49 Star design (50 star flags supplied free as soon as available). A base-mounted "Start-Stop" button operates both quiet centrifugal fan and shielded 75 watt floodlamp. Each unit is equipped with a heavy duty 20' cord including plug for standard 110-120 volt electrical outlet.

D. C. TURNER, INC., 165 N. Water St., Rochester 4, N. Y.

PILLOW RENOVATING SERVICE SE-317

Offers Economies in Dormitory Operation



In the Fluff 'N Puff pillow renovating process, the old ticking is opened and discarded, the feathers are shaken out into the revolving tumbler section,

and through the tumbling and agitation the feathers are cleaned and fluffed. Dirt, crumbled feathers, dust, etc. are dropped to the bottom through a screened opening and can then be removed from the machine by opening a sliding drawer. During the tumbling action the feathers are subjected to the rays of a series of powerful germicidal lamps, which act to kill bacteria present.

After the tumbling, cleansing, and sterilizing action is completed, the feathers are then blown into a separate ozone chamber, where they are de-

odorized by pure ozone, which also completes the germicidal process. Then the feathers, with enough new ones added to compensate for those that have been crushed and crumbled through use, are blown into a brand new ticking through an open corner; the operator sews up the opening, and the net result is what is to every intent a brand new pillow, fresh, clean, and as free from bacteria as possible.

FLUFF 'N PUFF PILLOW SERVICE OF AMERICA, INC., 1645 Hennepin Ave., Minneapolis, Minn.

SE-289



Practical, durable safety cushions can be made of plywood panels padded with cellulose rubber and rubberized hair, and covered with fire-resistant Vicrtex VEF Vinyl Fabric. These easy-to-maintain panels protect both children and walls. In addition, such cushions are a factor in helping to dampen noise in large gyms.

GYMNASIUM • UNION FREE SCHOOL, DISTRICT 10, MINEOLA, N.Y.

Vicrtex Grass Cloth



all these ideas

and many more — are yours
for the asking.

For this helpful guide
book for planning better
school wall surfaces with

VICRTEX V.E.F.*

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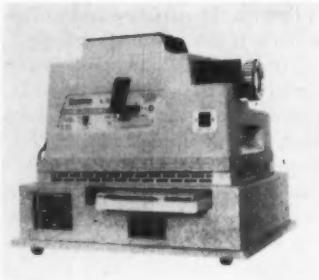
L. E. CARPENTER & COMPANY, INC.
Empire State Building, New York 1 • LOnagre 4-0800 • Mills: Wharton, N. J.
*vinyl electronically fused

SOUND/SLIDE PROJECTOR SE-318

Is Fully Automatic

The first fully automatic sound synchronized slide projector has been announced by the Amplifier Corp. of America. The new unit features a one-piece integrated construction of an automatic tape-cartridge record-play mechanism and a 500 watt projector. Models are available with monophonic or stereophonic record-play facilities utilizing two, three, or four tracks on $\frac{1}{4}$ inch magnetic tape. Depending upon tape speed, record-play time of various models range from 30 minutes to 8 hours.

A separate built-in recorder (on Rec-



ord-Play Projectors) permits programs to be produced with the projector and subsequently played back on the same or other playback projectors. During

SE-290



Blooming Prairie Jr.-Sr. High School, Blooming Prairie, Minn.
Archt: Haarstick, Lundgren & Assoc., Inc., St. Paul, Minn.
Photographer: Clark Dean, Infinity, Inc., Minneapolis, Minn.

SLATE CHALKBOARDS

first choice in leading schools

FOR EASIEST READING . . . WRITING . . . CLEANING



The growing number of award winning schools using slate chalkboards confirms slate's

- ... superior visibility
- ... unsurpassed writing and erasing qualities
- ... timeless good looks
- ... lowest cost per year
- ... simple maintenance

Write for free literature on slate chalkboards. You'll find them invaluable in choosing the proper chalkboard for your school.

500 million years in the making . . . NATURAL SLATE

PENNSYLVANIA SLATE PRODUCERS GUILD, INC.

Pen Argyl, Pennsylvania

Sponsored by producers of Pyramid and Keystone American natural slate chalkboards



recording, the slide change is manually controlled (either remotely or locally). Each slide change automatically puts a 20 cycle control tone on the same, or adjacent track. During playback, the control tone automatically changes the slide in precise synchronism with the original timing.

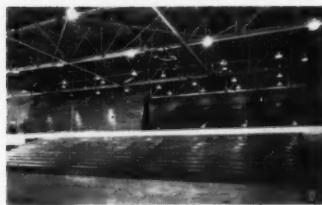
A time differentiated pulse length discriminator in the playback control circuit, stops the playback unit (and the projector, if desired) at the end of the program so that synchronization between sound and slide is always maintained. The entire unit may be automatically started by remote control with any contactual operating device such as a photocell, capacity, foot, door, or time switch. To facilitate alterations in the program material or in the slide change timing, either the program material or the slide change signal may be independently altered, if desired without affecting the adjacent channel.

The projector will automatically handle up to $40 \times 2 \times 2$ inch and $2\frac{1}{4} \times 2\frac{1}{4}$ inch slides. A 500 watt blower cooled lamp is used in conjunction with a 5 inch F/3.5 lens. Equipped with local and remote control (manual) slide change in addition to a built-in timed cycle change for 5/8/10 or 15 second intervals.

AMPLIFIER CORP. OF AMERICA, 396 Broadway, New York 13, N. Y.

DELAYED ACTION BLEACHERS SE-319

Have Unusual Seating Capacity



The new Berlin Ez-A-Way forward close, delayed action bleachers as installed in Niles Township High School, Illinois provide a total seating capacity of 3,568. The installation consists of 14 rows high bleachers with the seating capacity in the balcony of 2,128 seats. The rear balcony bleachers are enclosed with back panels and contain a rear seat for watching balcony athletic activities. The main floor balcony consists of 12 rows high wall-attached units with the seating capacity of 1,440 seats. The entire bleacher installation is opened and closed with a Berlin Chapman Gymaster.

BERLIN CHAPMAN CO., Berlin, Wis.

DUAL-TRACK TAPE RECORDER SE-320

In New, Economy Model



The new Knight Model KN-4050 Dual-Track Tape Recorder, a specially designed economy model, provides all of the desirable tape recording features of standard models. Simple to set up and operate, the KN-4050 has push-button selection of Record, Play, Rewind, Forward and Stop functions. There is a choice of two speeds— $7\frac{1}{2}$ and $3\frac{3}{4}$ inches per second. For convenient editing and labeling of recorded material, a digital counter "pinpoints" any portion of the tape.

Recordings can be made with the microphone supplied, or directly from a hi-fi system, radio or TV set. The unit has a safety interlock to prevent accidental erasure, and an indicator light shows proper recording level. Separate volume and tone controls are also included, as well as a microphone input and phono-radio input. A 4" x 6" speaker is built-in, and a jack is provided for the addition of an external speaker.

The Knight recorder is $10\frac{1}{8}$ " high, $15\frac{1}{2}$ " wide, and $15\frac{1}{2}$ " deep. Styled in gray and black leatherette case, the unit is guaranteed by Allied for one full year. The unit is supplied with ceramic microphone, 5" reel of tape, and 7" take-up reel.

ALLIED RADIO CORP., 100 N. Western Ave., Chicago 80, Ill.

ATOMIC REACTOR

SE-321

Extremely Flexible Teaching Aid

The extreme operating flexibility designed into Columbia University's new sub-critical atomic reactor makes it one of the most versatile teaching aids in existence for training tomorrow's vitally-needed nuclear engineers.

Designed by Dr. Edward F. Leonard of Columbia, the graphite pile is shielded by a unique array of reversible paraffin slabs that permit rapid change-over of the exponential pile from reflected to unreflected operation.

November, 1959

The pile consists of 270 bars of high-purity, nuclear-grade graphite supplied by National Carbon Co., Division of Union Carbide Corp. Each bar is 4 inches square and 60 inches long. A square notch was cut from the corner of 113 of the bars to allow insertion into the pile of aluminum tubes containing uranium-bearing fuel slugs. Neutrons are fed into the pile from the bottom layer of graphite bars, where a plutonium-beryllium neutron source can be placed in various locations.

As neutrons enter the pile, they strike

the uranium fuel slugs, causing nuclear fission—the splitting of the uranium atom that produces more neutrons. In the sub-critical pile, the amount and type of fuel is limited so that a chain reaction cannot possibly occur. Neutrons produced by fission travel at about 6,000 miles a second, but are slowed down by the graphite to about one mile a second, in order for fission to be properly sustained.

NATIONAL CARBON CO., DIV. OF UNION CARBIDE CORP., 30 E. 42 St., New York, N. Y.

SE-291

now... you can have a planned "Business Training" Laboratory with Cramer

Profession-L

MODULAR DESK UNITS and
FAMOUS CRAMER POSTURE CHAIRS

TYPING
SHORTHAND
BOOKKEEPING
MACHINE PRACTICE
GENERAL BUSINESS



Teach office procedure . . . offer senior secretarial training . . . in an authentic office atmosphere! Here is the first laboratory-designed modular furniture for business training. All types of office work can be taught in the same classroom.

Typewriter desks and posture chairs feature fingertip adjustments. Maintenance free modern design. Plastic tops. Units will not "walk" from vibration.

7 basic free-standing units, plus 3 auxiliary units and optional bookshelves, combine to make hundreds of practical units.

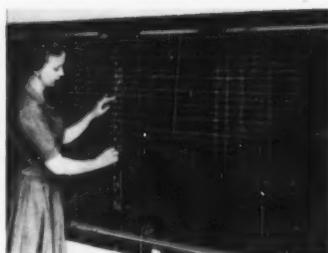
Cramer POSTURE CHAIR COMPANY, INC.

625 ADAMS / DEPT. SE-11 / KANSAS CITY 5, KANSAS

CHALKBOARD T-SQUARE SE-322**For Making Ruled Forms**

Chalkboard drawings, ruled forms, graphs, mechanical and geometric drawings, and music staves can be made quickly and neatly with a new teaching aid now available. Called the L & L T-Rule, the device can be mounted permanently on any chalkboard in seven minutes. It resembles a T-square mounted in a track, movable across the chalkboard surface, and adjustable to any angle.

With it, the teacher can rule parallel

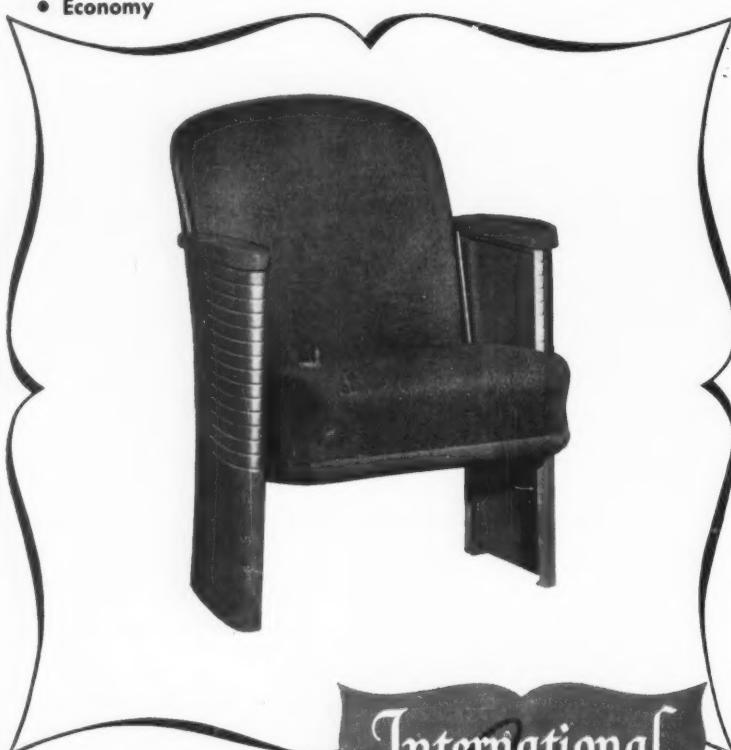


lines vertically, horizontally, or at any angle. A bookkeeping form which might require 15 minutes for ruling with a yardstick can be drawn in 1½ minutes

when you CHOOSE INTERNATIONAL CHAIRS you are assured of . . .

- Correct posture design
- Freedom from maintenance
- All-steel welded construction
- Appearance and styling
- No nuts, bolts or screws
- Long life
- Economy

Ask an INTERNATIONAL Seating Engineer to consult with your architect and business manager, without obligation, of course.



International Seat Division
Union City Body Company, Inc.
Union City, Indiana

SE-292**COMBINATION SEALER AND POLISH****Works Well on Most Floors**

A finish for floors which both seals and polishes in one operation has been developed by Huntington Laboratories. The combination sealer and polish, called Poli-Seal, works well on light terrazzo, white cement, magnesite, white marble, cork, wood, ceramic tile, quarry tile and slate floors. It may also be used on most vinyls and linoleums. Made from a special blend of carefully selected, light-colored raw materials suspended in special solvents, Poli-Seal provides a water-white finish that will not darken the lightest floors. Poli-Seal is also water-resistant and deters efflorescence of hard floors.

Poli-Seal makes maintenance faster, easier and less costly. When finished with this combination sealer-polish, floors require no further sealing or waxing.

HUNTINGTON LABORATORIES, INC.,
Huntington, Ind.

CONSTRUCTION KITS SE-324

For Scores of Hobby Uses



A new kind of construction kit, called D-Stix, permits "3-dimensional visualizing" in the planning of home craft projects. Science fans use them to set up miniature solar systems, construct geometric figures and visualize molecular structures. Children build all manner of models with versatile D-Stix Kits. D-Stix consist of colored wood sticks of various lengths, about $\frac{1}{8}$ " thick, and "quick-on" rubber joints about $\frac{3}{16}$ " in diameter. Joints include Universal and T-Connectors, which permit D-Stix to pass clear through. Ample pieces are furnished to construct complex figures and structures. Kits come in two sizes: Stock No. 70,209 (230 pieces), and Stock No. 70,210 (370 pieces).

EDMUND SCIENTIFIC CO., Barrington,
N. J.

METALLIC SIDING

SE-325

Waterproofs and Insulates

A new liquid metallic siding in a range of colors that both waterproofs and insulates in one coat, is announced by Pace Products, Inc. Called Aluma-Chron, this product combines the durability and insulation of aluminum, and the beauty of a conventional, decorative outside paint. It provides a vapor-proof barrier, impervious to moisture. Aluma-Chron contains Alcoa pure aluminum flakes, that reflect the sun's rays to substantially reduce summer building temperature. In winter, Aluma-Chron acts inversely to keep heat inside the building. Aluma-Chron is recommended for cement and cinder block constructions.

On sizable areas, spray application is recommended. Aluma-Chron with 40 lbs. of pressure, and $\frac{1}{4}$ " nozzle opening, can be sprayed at the rate of about 6,000 square feet in 8 hours. Coverage will run 100 square feet per gallon on metal, to 50 square feet on porous cement.

PACE PRODUCTS, INC., 1609 Washington St., Kansas City 8, Mo.

PLASTIC BINDING UNIT

SE-326

Is Unusually Compact

The first single-unit punching and plastic-binding machine designed for use in the office has been announced by the American Photocopy Equipment

Co. Known as the Apeco ComBind Bindak, the new device is highly portable—weighing less than ten pounds—and measures a scant $15\frac{1}{2} \times 14\frac{1}{2} \times 6$ inches high.

Punching and plastic binding units generally are bulky, high-speed devices, uneconomical to operate except where very large quantities are desired. Both operations have now been consolidated in a single, low-cost machine, which is both easy and economical to operate.

The ComBind is expected to find service in schools for theses, disserta-

tions, and reports. It can easily be carried from department to department, instead of carrying the work to the machine.

An added convenience is the operating handle which can be removed and inserted in either the left or right side of the unit, thus enabling it to be used by left- or right-handed persons.

Attractively styled, the unit is finished in brown and beige with chrome-buffed trim.

AMERICAN PHOTOCOPY EQUIPMENT Co., Evanston, Ill.

SE-293

from
STACOR
...new functional units
for your school

THE FLEX-MASTER
LIFETIME QUALITY **MULTI-STUDENT**
INDIVIDUALIZED DRAWING UNIT **NL-1200**



provides open working surface and horizontal board storage facilities for

12 students

- Drawers have individual locks, masterkeyed . . . hold boards up to 20×26 in horizontal position plus tools, other material.



for 10 students
the DU-1000



for 9 students
the DU-900



for 7 students
the DU-700



for 6 students
the DU-600



5-drawer
cabinet unit
the DU-500



Dual boards and
drawer space for 12
the DU-1200

Write TODAY for complete NEW catalog. Dealer inquiries invited.



Manufacturers of Lifetime Quality School & Drafting Equipment
STACOR EQUIPMENT CO.

281 Emmet Street, Newark 5, New Jersey • Bigelow 2-6600

SCHOOLROOM DARKENING DRAPERY MATERIAL

SE-327

Is Flame-Resistant

A new room-darkening drapery material, color-styled to blend with modern classroom decorating schemes, is being introduced through drapery fabricators by the Du Pont Company's Fabrics Division.

Ivora flame resistant vinyl drapery material, specifically constructed for school use, comes with an aluminum coating on the back to achieve sufficient "dim-out" to insure clear screen images, rather than complete "black out." This fulfills the current preference of school officials and teachers who desire less

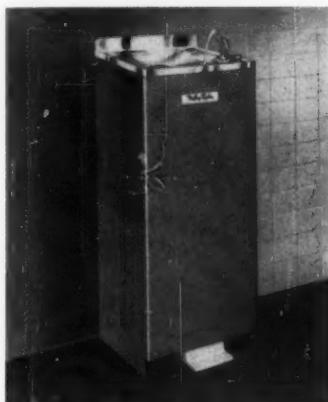
than complete opacity so pupils can take notes and be seen by teachers. The outer side, of uniform aluminum, helps keep rooms cool by reflecting close to 50 per cent of solar heat when draperies are fully closed.

Ivora has the natural texture of a conventional fabric, is soft, lightweight, with high strength and resistance to tear. The four solid pastel colors—beige, turquoise, blue, and yellow—are permanent and so is the built-in flame-resistance property. Loose dust will fall off in operation and smudges or soil marks can be wiped off with a cloth or sponge, water and soap.

E. I. DU PONT DE NEMOURS & Co.,
Wilmington, Del.

ELECTRIC WATER COOLER SE-328

In New, Compact Unit



"BEST POWER SUPPLY for science experiments"



Mr. William Fischer, science department head, demonstrating electroplating with a Lab-Volt unit.

Middletown Township High School (west wing), Middletown, N.J.

"Lab-Volt POWER STATIONS have really proved themselves here" reports Bill Fischer, head of the science department at Middletown High School.

"More than a year of heavy usage has proved to us that Lab-Volt Units are the best means of supplying A.C. and D.C. power for our electrical experiments. Not one malfunction has occurred to slow us down, and savings over other permanent power supply systems have completely equipped our labs with top quality apparatus such as that in the photo. I do not hesitate to recommend Lab-Volt Power Stations as the wholly practical and economical solution to the problem of supplying variable A.C. and D.C. power for science labs."

→ SEND TODAY for complete information on **Lab-Volt POWER STATIONS**, now available in portable or recessed models.



BUCK ENGINEERING COMPANY, INC.

37 MARCY STREET, FREEHOLD, NEW JERSEY • FREEHOLD 8-1111

The Halsey W. Taylor Co. announces the addition to their line of another series of Electric Water Coolers, called the Wall-Tite. This new design follows the trend of today's demand for a cooler with concealed plumbing and a saving in floor space. The Wall-Tite rests on the floor, fits snugly against the wall facing, and is easily installed.

This series is available in 6, 11 or 16 gallon capacities. The cabinet is only 15 3/4" wide, extends 13" from the finished wall and stands 40" high. The stainless steel top (18-8 type 302) with standard No. 4 polish, has a fully contoured, splash-resistant basin and wall protective shield.

THE HALSEY W. TAYLOR CO., Warren, Ohio.

PASTE PEN SE-329

Ideal for Classroom Work

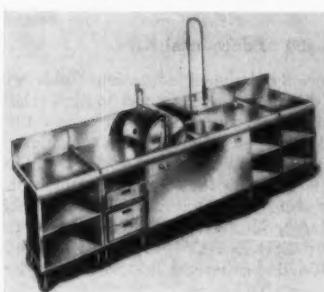
The new Exec Paste Pen, an ideal tool for use in the classroom, is being introduced by Distributors East. Commended by the Consumer Service Bureau of Parents' Magazine because of its high quality and absolutely nontoxic paste, the streamlined Paste Pen makes 5,000 dots without refilling. Ideal for all pasting projects, it is a special boon to students and teachers in the classroom—enabling the user to pinpoint the paste where it is needed without wasting a drop or soiling self or surface.

Absolutely safe and completely leak-proof, Exec Paste Pen can be used for numerous classroom or home projects, such as mounting on bulletin boards, windows or walls, scrap books, arts and crafts activities, holiday decorations, photograph albums and repair jobs.

DISTRIBUTORS EAST, 625 W. 140th St., New York 31, N.Y.

DISHWASHER**Designed for Efficiency**

SE-330



Quicker, more convenient, and easier to operate is the way The Bastian-Blessing Company describes its new 1557 model Dish-o-lator. The lift-out refuse can is now located in the right hand rear corner of the soiled dish section, and the sink has been moved to the front and placed at the immediate right of the dishwasher. Now dishes, after the paper and garbage have been scraped into the refuse can, can be racked, pre-rinsed over the sink and put right into the dishwasher, saving time and effort. Shelving for dish racks is provided at both ends of the unit.

Supplemental 2-foot dish sections with two shelves are available.

THE BASTIAN-BLESSING CO., 4203 W. Peterson Ave., Chicago, Ill.

FILM CONDITIONER

SE-331

**Cleans, Protects, Preserves,
Lubricates Film**

A new film cleaner and conditioner has just been put on the market under the trade name, Film-New. It is used for cleaning and preserving old and new motion picture film—both color and black and white—micro-film and television film strips.

Film-New cleans film thoroughly and provides a clear protective coating that is tough and scratch resistant. It protects and preserves both picture and sound track, keeping the film flexible—preventing bleeding or fading of color film.

Briefly, Film-New provides these additional benefits: 1) It is nonflammable and nontoxic under the conditions of its use. 2) It lubricates the film so that it runs smoothly through a projector without jumping, sticking or tearing between sprocket holes. 3) It has the proper rate of evaporation for use in film cleaning machines. 4) It has been given a clean, pleasant odor. 5) It prevents the formation of growth of fungus or mold on film. 6) It prevents the build-up of static elec-

tricity. 7) It prevents light damage, air damage and moisture damage. 8) It is not harmful to the skin.

AMPCO CHEMICAL DIVISION, 1135 Pearl Street, Boulder, Colo.

DEMONSTRATION FUME HOOD SE-332**Offers All-Around Visibility**

Laboratory Furniture Company, Inc. announces its new portable science demonstration table for schools and colleges. This unique unit safely confines and exhausts smoke, heat, and fumes given off during demonstration experiments—yet

does not in any way obstruct the students' view. This is accomplished by means of a completely transparent enclosure over the top of the table, allowing students to see the experiments from any place in the room. It eliminates shifting the class or crowding around fume hoods that are unsuitable for demonstration purposes.

This amazing new fume hood can be easily moved from room to room for demonstrations in laboratories, lecture halls or any room.

LABORATORY FURNITURE CO., INC., Old Country Rd., Mineola, L. I., N. Y.

SE-295

Tuffy Scores— Another Winner!



CRAM'S NEW PHYSICAL-POLITICAL 12" GLOBE

- Beautiful colors. No doubt the most beautiful Physical-Political globe on the market.
- More name places. Easy to read type.
- Globe features 3 oceans depths — with ocean currents clearly shown.
- Five land elevations with special color treatment for the mountain areas that lends to the beauty of the globe and still gives a realistic picture.
- Globe shows sun line — Analemma. Mounted on Cram's famous "Tuffy" ball.
- Globe is now ready for immediate delivery.
- Have your Cram Man call for demonstration — or send for Circular No. 258 for complete information.



THE GEORGE F. CRAM COMPANY, INC.
730 EAST WASHINGTON STREET • INDIANAPOLIS 2, INDIANA



AUDIO-VISUAL AIDS

SE-401 Audio-Visual Training Films

The essentials of audio-visual training and guidance are presented in this new series of three color films. Every phase of 16mm film work, from film handling to supervision, is covered. Titles are: *Facts About Film*, *Facts About Projection*, and *The Audio-Visual Supervisor*. INTERNATIONAL FILM BUREAU, INC., 57 E. Jackson Blvd., Chicago 4, Ill.

SE-402 Forestry

Tomorrow's Trees. 30 minutes. Color. Free. The story of modern forestry in the

Pacific Northwest is dramatized in this new motion picture. The movie includes scenes taken from the top of a 250-foot Douglas fir tree as it is felled, and from a helicopter planting tree seeds. Time-lapse views show a fir's growth and struggle for survival over a two-year period. WEYERHAEUSER TIMBER CO., DEPT. OF PUBLIC INFORMATION, Tacoma 1, Wash.

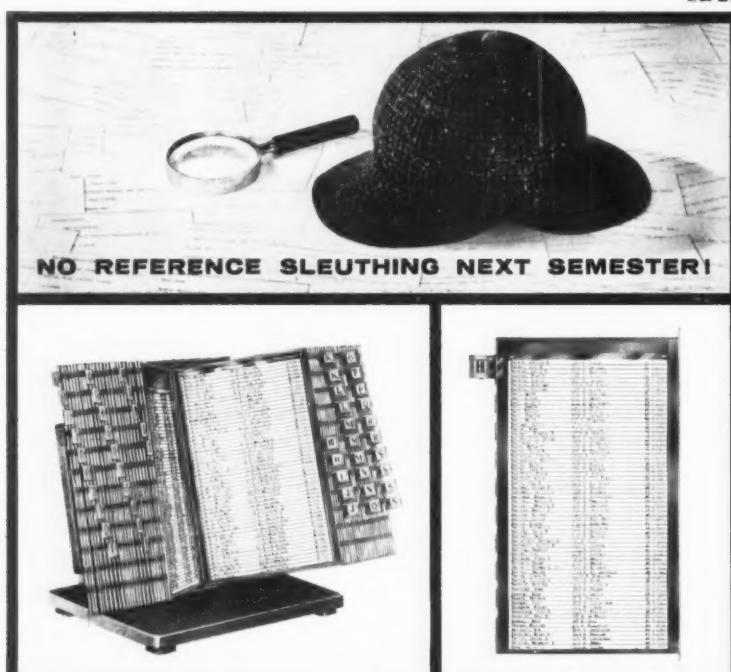
SE-403 SVE Tabloid for Teachers

Visual Review is the name of a new filmstrip tabloid, designed to aid teachers in selecting new and timely filmstrip material. The new publication will be distributed quarterly. It is offered free to

teachers, principals, librarians and administrators. SVE, VISUAL REVIEW, 1345 Diversey Parkway, Chicago 14, Ill.

SE-404 Educational Kit

Specially designed educational aids will be distributed without cost to high school teachers in connection with a new film, *Solomon and Sheba*. The kit includes a color filmstrip depicting scenes from the film related to the reign of Solomon and the visit by the Queen of Sheba to Israel; a large, illustrated, colored map of the Near East in 935 B.C.; a special study guide discussing the historical and legendary background of Solomon and Sheba with appropriate points for classroom discussions; and a detailed, illustrated book on "The Living Art of the Motion Picture" which covers the step-by-step creation of a motion picture from inception to the final product. Requests for this free material should be sent to SOLOMON AND SHEBA, UNITED ARTISTS CORP., 729 Seventh Ave., New York, N. Y., specifying the number of maps, guides and books needed. Because of limited supply, only one filmstrip may be requested for a school.



Acme Visible Flexoline Indexes Make Student Facts Easy To Find

School's packed—classes humming—but who's who and where? There's an inexpensive way to find out as quick as a glance. Acme Visible Flexoline indexes give you fingertip control of the complete student enrollment—serve as a cross index to home room or class.

There are no cards to re-shuffle—no lists to re-type to keep reference day-to-day

perfect. Minimum school office personnel easily handle these portable units with capacities of 350 to 25,000 names.

Write Acme Visible for more facts about the world's fastest reference equipment for educational administration. FREE detailed booklets illustrate various school record systems—one tailored to your needs. MAIL THIS COUPON NOW!

ACME VISIBLE

ACME VISIBLE RECORDS, Inc.
6111 West Alview Drive, Crozet, Va.
Please send me FREE detailed booklets on school record systems.

NAME _____ TITLE _____

SCHOOL _____

CITY _____ ZONE _____ STATE _____

SE-405 Efficient Use of the Library

Use Your Library. 81 frame filmstrip, black and white. This revised filmstrip presents the minimum information for use of the library by beginning high school students and advanced junior high pupils. It shows how to find books, how to find factual information, and how to find magazine articles and pamphlets. AMERICAN LIBRARY ASSOCIATION, 50 E. Huron St., Chicago 11, Ill.

SE-406 Elementary Grade Spanish

Gloria and David Introductory Spanish Language. Educators are, more and more, giving strong support to starting language training in the elementary grades. This series, which consists of 14 color filmstrips and 14 long-playing records with teacher's study guide, provides a language laboratory right in the classroom with no complicated electronic devices and no special space-consuming equipment. ENCYCLOPAEDIA BRITANNICA FILMS, 1150 Wilmette Ave., Wilmette, Ill.

SE-407 Shakespearean Films

Three new filmstrips to aid English classes in the study of Shakespearean plays are among this month's new releases. The films are designed to bring the text to life with highlights of each scene as played by actors of the Old Vic Theater and to stimulate interest in a more thorough study of each play. The subjects are as follows: *As You Like It* (36 frames); *Julius Caesar* (38 frames); *A Mid-Summer Night's Dream* (37 frames). A previous release: *The Merchant of Venice* (52 frames) is also a unit of this series. A teaching handbook is supplied with each of these films. UNITED WORLD FILMS, INC., 1445 Park Ave., New York 29, N. Y.

MANUFACTURERS' CATALOGS

SE-408 Aluminum Window Walls

Glidorama Custom Aluminum Window Walls. Because Glidorama Window Walls are custom-built to the architect's specific size requirements, construction efficiency is possible in two-story buildings by specifying panels of double story height. This folder shows the variety of design effects that are possible through movable window sections. Construction details are graphically shown and explained. GLIDORAMA, A DIV. OF WHIZZER IND., INC., 350 S. Sanford St., Pontiac, Mich.

SE-409 Folding Partitions

Haws Electric-Hydraulic Folding Partitions. A number of unique things can be done with the Haws Folding Partitions. A partition down the middle of a gymnasium can be utilized as a game wall with hand ball played against it on one side and tennis on the other. Room dividing is accomplished easily—the partition moves into position by electric power. Complete specifications are given in this comprehensive catalog. ROBERT HAWS CO., 15722 Telegraph Road, Detroit 39, Mich.

SE-410 Coin Sorter

Like Magic is the name of this booklet and "like magic" is the way coins are sorted with this new automatic machine. You simply pour the coins into a hopper, lift the lid, and the coins are automatically sorted into individual compartments. MI-COIN CORP., 236 Reed St., Reading, Pa.

SE-411 Power Mowing

Performance, power, and more for your money . . . that's what the new booklet *Power vs. Drudgery* offers to users of Gravely equipment. Some of the items described are the Gravely Tractor, the Rotary Plow, Gang Mowers, Snow Blowers, and a number of accessories which will make school grounds maintenance even easier. GRAVELY TRACTORS, INC., Dunbar, W. Va.

SE-412 Photocopy Machine

115 Ways a Photocopy Machine Can Save You Money . . . Hundreds of applications for the Contoura-Portable and the Contouramatic Mark II photocopy machines are listed in this useful booklet. For your free copy, write to F. G. LUDWIG, INC., 163 Coulter Pl., Old Saybrook, Conn.

SE-413 Baseboard Radiation

Is heating your problem? Rittling's new bulletin gives dimensions and capacity data for five different heating elements which fit one size enclosure. Ask for a copy of *Bulletin No. R-596* or circle our SE number on the card at the back of the magazine. THE RITTLING CORP., Buffalo 5, N. Y.

SE-414 Planning Gymnasium Seating

Planning Book for Gymnasium Seating. Here is specific information to help you plan your gymnasium for comfort, convenience, and proper cleaning. How Universal Roll-A-Way Bleachers meet these objectives is graphically shown in this unusually colorful and attractive folder. UNIVERSAL BLEACHER CO., Champaign, Ill.

SE-415 Group Showers

Bradley Group Showers is the title of a newly-published bulletin covering multi-person shower baths. All details of the basic Shower Column (three heights) are given along with method of installation

and floor plan suggestions. Of special interest is the new Wall-Mounted 3- and 2-person shower with dimensional data. BRADLEY WASHFOUNTAIN CO., 2203 W. Michigan St., Milwaukee 1, Wis.

SE-416 Engineering Symbols for the Electric Typewriter

For the field of Engineering (R-8964.6). A method of using an electric typewriter for quick, convenient typing of special symbols and equations needed in the field of engineering is the subject of this new booklet. The secret is interchangeable type heads, which snap into place in one simple operation by the typist. REMINGTON RAND, DIV. OF SPERRY RAND CORP., 315 Park Ave., S., New York 10, N. Y.

SE-297

Floor Machine re-waxes, polishes and vacuums...all in a single pass



CUSTODIAN MERELY GUIDES Tennant Model "E" Floor Machine as it buffs off dirt and applies renewal coat of wax. Vacuum picks up dust and dirt!

In a fast, single operation, the 21" TENNANT Model "E" applies dry renewal wax, buffs it to a rich luster, and vacuums up dust and dirt!

School custodians find they can maintain hallways, gyms and classroom floors in about *one-third* the usual time and often with less than *one-half* the usual cost for wax!

Cleaning cylinder works fast

High speed cleaning cylinder revolves at 1135 rpm. Rapidly buffs off dirt and applies tough, smooth coat of protective wax—polished to a uniform gloss. No rings or swirls as with other floor machines.

Picks up dust and dirt

Powerful 265 cfm vacuum picks up dust and dirt that ordinary machines leave on the floor. Self-propelling action plus light weight (less than 100 lbs.) gives excellent handling ease.

Just guide it forward as it quickly cleans, re-waxes and polishes a sparkling 21" path!

WRITE for illustrated bulletins. When you get details on the TENNANT "E" Floor Machine, ask, too, for the money-saving story on TENNANT'S new No. 15 Heavy-Duty Floor Seal . . . the amazing Tennant System discovery that has *TWICE* the life of most other heavy-duty floor seals! G. H. Tennant Company, 729M N. Lilac Drive, Minneapolis 22, Minnesota.



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